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# OREIGN AGRICULTURE



esting peppers, Bulgaria.

China—Still a Potentially Big Farm Market

Bulgaria's Farmers Reap Profits

March 31, 1975

Foreign Agricultural Service U.S.DEPARTMENT OF AGRICULTURE

#### FOREIGN AGRICULTURE

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Harvesting bell peppers, an important Bulgarian export item, on an experimental station in Ruse, northeast Bulgaria. Much of the average 250,000-ton volume of fresh vegetables exported annually moves to the Soviet Union and to East European countries.

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U.S. farm trade with China may fall sharply in fiscal 1975 as a result of that country's better crops and recent cancellation of imports of U.S. grain and cotton, but—

# The PRC Is Still a Good Potential Market for Farm Exports

By RICHARD J. GOODMAN Associate Administrator Foreign Agricultural Service

DESPITE THE RECENT dimming of immediate prospects for U.S. farm trade with the People's Republic of China (PRC), that country continues to represent an enormous potential market —as westerners have recognized ever since Marco Polo.

Pointing up the possibilities is the major role agriculture has played in the recent past in opening up trade with China. During the 2 fiscal years ended last June 30, agricultural products accounted for around 85 percent of total U.S. exports to the PRC. In the first year of renewed trade with that country (fiscal 1973), these farm shipments amounted to \$200 million, mostly cotton, corn, and wheat. And in the second year (fiscal 1974), they rose to \$852 million, with substantial increases in cotton, corn, and wheat and \$142 million worth of soybeans.

In the current year (fiscal 1975), U.S. exports to China will be substantially below last year's, mainly because of sharp declines in imports of U.S. wheat and cotton—below what had been expected. This in turn has caused the Government and trade to re-examine their conclusions about the future of trade with China.

There is little doubt that in future years the Chinese will be in the market for grains and cotton. The question is: How much and from whom? The Chinese will, of course, be interested in exporting textiles and some other products to the United States. As the world economy improves, they would expect to export plastics, small manufactures, and light machinery in competition with the West.

The past year has evidently been a

Based on a speech delivered at the Seattle Conference on China Trade, Seattle, Washington, February 27, 1975. good agricultural year for the Chinese. Each year sees more evidence of the cumulative effects of the work they are doing in water conservation, wells, reservoirs, land leveling, and other irrigation and drainage projects. Each year, there is less and less chance of major crop failure in a nation that in older times would average almost one famine every year.

On the minus side, it appears that the Chinese may not be keeping up in the agricultural sciences. Scientists, like other professionals, are required for ideological reasons to spend time as farm laborers. Some Westerners believe that Chinese scientists are not being trained as well as they were in the past, and that basic sciences are being neglected.

The Chinese make much use of organic fertilizers—both animal and human. This too could cause a leveling off in progress, as the gains from organic fertilizer tend to reach a plateau. However, observers report no signs of obvious nitrogen deficiencies, and the Chinese will be able to expand nitrogen production with the new fertilizer plants now under construction.

Transportation continues to be a problem with relation to the movement of farm products. Inadequate railway lines, a deficiency of rolling stock, and the lack of storage along transportation routes all are limiting factors in the marketing of farm products. One of the results is the effort by PRC leaders to encourage regional self-sufficiency—in part through building regional and local storage facilities.

Prospects for U.S. trade with the PRC in grains, soybeans, and cotton look like this:

Grain. Since grain exports com-



menced in the fall of 1972, the United States has shipped to the People's Republic of China a little under 8 million metric tons of wheat and corn valued at almost \$828 million. During this period, grain exports accounted for over 50 percent of total U.S. exports to the PRC. The United States supplied nearly 65 percent of total PRC grain imports in 1973-74, but the U.S. share will fall to a little over one-fifth in 1974-75.

Prospects for continuation of this substantial grain trade with the PRC are uncertain, however, especially in view of recent cancellations by the PRC of sizable imports of U.S. wheat.

The PRC currently has 3-year agreements with Canada, Australia, and Argentina to provide a total of 3.4-4.0 million tons of wheat and 350,000 tons of corn annually through 1976. If necessary, additional grain generally can be obtained from these countries.

On the other hand, the United States, at least up to now, seems to have been viewed by the Chinese as a residual supplier. There have been some problems, as in the case of TCK smut and certain aspects of arrival quality, but most of these are the simple result of the two sides getting reacquainted with one another's needs, standards, and procedures. None of these appears insur-



Left, sheep grazing in Sinkiang Province of the PRC. Above, harvesting rice with machinery—an increasingly common scene, although use of hand labor still predominates.

#### TRADE OF THE PEOPLE'S REPUBLIC OF CHINA, FISCAL YEARS 1973-75

TRADE OF THE FEORES REPOBLIC	or critica,	July-June	1973-75
14	1070 72		1074 75 1
Item	1972-73	1973-74	1974-75 1
U.SPRC trade:	Million	Million	Million
All trade:	dollars	dollars	dollars
U.S. exports to PRC	213.7	1,091.0	(²)
U.S. imports from PRC	47.5	86.6	(²)
Total	261.2	1,177.6	(²)
Agricultural trade:			
U.S. exports to PRC	200.0	851.5	300
U.S. imports from PRC	19.6	23.6	<b>(</b> <sup>2</sup> )
Total	219.6	875.1	(²)
Grain imports:	Million	Million	Million
All grain:	metric tons	metric tons	metric tons
United States	1.5	4.8	1.5
Canada	4.4	1.3	2.6
Australia	.3	1.2	1.6
Argentina	_	.3	.2
France	_	_	.7
Total	6.2	7.5	6.6
Wheat:			
United States	.8	3.0	1.4
Canada	4.4	1.3	2.6
Australia	.3	1.2	1.6
Argentina	_	_	.2
France			.2
Total	5.5	5.5	6.0
Corn:			
United States	.8	1.8	.02
Argentina		.3	.54
Total	.9	2.1	.56
Soybean trade:			
Exports		.13	.25
Imports from United States	.03	.66	.13
	1,000 bales 3	1,000 bales 3	1,000 bales
Total	1,700	1,600	250
From United States	466	878	<sup>4</sup> 104
	Mil. Ib	Mil. Ib	Mil. Ib
Tobacco imports from United States	_	3.4	4-5
Inedible tallow imports from United		46.0	E0.0
States	_	46.8	50.0

<sup>&</sup>lt;sup>1</sup> Preliminary. <sup>2</sup> Not available. <sup>3</sup> 480-lb bales. <sup>4</sup> On a crop year, September-August basis, imports are estimated at 250,000 bales.

mountable, and in the case of TCK smut the PRC side showed a constructive approach, seeming to demonstrate a desire to cooperate to keep open the way for trade. So, it will be interesting to see if the United States remains a residual supply source, or whether—for reasons of dependable supply or otherwise—it becomes a more regular source.

A PART from where the PRC gets its grain imports, there are a number of considerations that could keep total imports from rising much in the next few years:

- The PRC is basically self-sufficient in food production, with imports accounting for only a small portion of total grain supply. At the same time, the PRC exports a substantial quantity of foodstuffs to help offset the cost of imports. Over the past decade, the PRC has made considerable progress in expanding grain production, especially in the heavily populated and chronically food deficit provinces in the north, which are reported to be self-sufficient in grain production. These provinces are the core of the PRC's most important wheat-growing area.
- Grain reserves, currently claimed to be 40 million tons, provide some insurance in case of a poor harvest.
- Prospects are good for near-term expansion of grain production because of increased availability of chemical fertilizer (13 large chemical complexes are to be built in the next 3 to 4 years), continuing improvement in water control for both irrigation and drainage, increased multiple cropping, and other improvements. It should be pointed out, however, that a group of U.S. scientists who visited the PRC in 1974 concluded that basic research in agriculture has been lagging in that country and, if uncorrected, could pose some restraints on long-term agricultural growth.
- Continued success of birth control measures should help to hold down the population growth rate.
- An improving transportation network will facilitate internal movement of grain. The poor transportation system has been an important factor in the PRC's decision to import grain to supply the big cities and industrial centers on the east coast.

There is a question relating to grain for feed for China's animal agriculture. We frankly do not know much about how close China is to the sort of income situation that begins to demand more fed livestock products, but it cannot be far away. We do know they have begun importing corn on a regular basis, and we know that some of that imported corn is going for feed for poultry. We also know that corn production is already one, if not the top, priority item for farm output expansion. If and when the export earnings should permit regular dependence on imported feed-stuffs for meeting animal industry expansion goals, a very promising area for greater trade could emerge.

Soybeans and products. In the late fall of 1972, the U.S. Department of Agriculture, through its commodity intelligence gathering facilities, became convinced that the PRC—historically a major soybean and vegetable oil exporter—was seeking soybean oil for importation. While USDA estimates indicated cottonseed and soybean production had declined sharply that summer, the PRC had not resorted to covering domestic shortages by imports, but had instead resorted to belt tightening.

In November 1972, the Department published views noting probable PRC import requirements for 100,000 tons of soybean oil. This quantity reflected the decrease in the PRC's vegetable oil supply directly attributable to reduced supplies of cottonseed and soybeans (soybean production was down 400,000 tons and cottonseed 465,000 tons in 1972). U.S. soybean oil exports to the PRC began to show up in December, when the November export data became available and by the end of the season the total quantity shipped from U.S. ports exceeded 150 million pounds (68,000 metric tons). According to USDA calculations, the PRC became a net importer of vegetable oil in 1972-73.

Based on fragmentary information, the PRC was unloading the U.S. soybean oil at North Chinese ports adjacent to the areas having experienced the reduced cotton crop. We concluded that vegetable oil supplies in these heavily urban, industrialized cities had fallen to a point where already-reduced rations could not be maintained.

Before the end of the 1972-73 crop year, the PRC contracted for about 28 million bushels of U.S. soybeans, scheduling delivery primarily in 1973-74. These purchases were made before the sharply improved 1973 cottonseed and soybean harvests became known and while foreign exchange reserves ap-

peared to be quite adequate.

The cancellation of additional purchases of 600,000 tons (22 million bu) of U.S. soybeans scheduled for delivery in 1974-75 appears to reflect the improved domestic vegetable oil supply situation and/or a deteriorating foreign exchange position. We believe there exists a real need for vegetable oil imports, as well as for additional protein feeds for hog and poultry feeding.

Cotton. Practically all of China's textiles are made of cotton, and availability per person is still quite low. It can be assumed that there is a large unsatisfied demand for textiles. Additional demand for cotton also could develop if China is able to expand its export textile business. In 1974, it was the fifth largest foreign supplier of cotton textiles to the United States, earning \$30.3 million from this export.

On the supply side, China has had some success in increasing cotton production, but we do not have completely reliable data. We do know that after importing an average of 425,000 bales per year during 1965-69 (cotton seasons beginning August 1), China upped imports to 691,000 bales in 1971-72, 1,944,000 in 1972-73, and 1,640,000 in 1973-74. Some of this increase may have been caused by a production loss of 1.4 million bales as a result of a bad crop in 1972-73. Some could have been because of overpurchasing on a rising market.

MPORTS in 1974-75 may be around the 800,000-bale level, considerably down from those of the last two seasons but well above the 1965-69 average. Recent trade reports have indicated that China has sold quantities of Chinese-origin cotton to Hong Kong, Japan, and Europe. Per capita cotton consumption, however, is very low, and China is likely to continue to be a net importing country. It could be hazarded that future imports will continue to average above the 1965-69 level, but might not go over the million-bale mark unless there is a substantial decline in production.

U.S. cotton exports to the PRC were zero during 1965-69. Exports in 1972-73 of 585,000 bales were 30 percent of total imports by the PRC that season. In 1973-74, U.S. exports of 891,000 bales were 54 percent of the total. U.S. exports for August 1-February 23 of 1974-75 totaled 103,700 bales. But outstanding orders for 466,000 bales were

reduced in mid-February to 208,000 bales following shipment of 25,000 bales, plus cancellation of orders for about 233,000 bales and payment of an indemnity to the seller. As a result, it now appears that the United States may export only around 250,000 bales to the PRC this season.

The U.S. proportion of cotton exports to the PRC was probably larger than usual in 1972-73 and 1973-74 because of the rapprochement between the two countries and a lack of supplies, except at much higher prices in some of the other cotton exporting countries. East Africa, Iran, Pakistan, the Sudan, Syria, and Turkey have also been large suppliers of cotton to the PRC.

Although the PRC is likely to continue to want to purchase cotton from other sources for political and economic reasons, the United States has some offsetting advantages and should be able to continue to participate in this market to a considerable extent in the future.

In addition to grains, soybeans, and cotton, the Chinese imported a small amount of U.S. fats and tallow in fiscal 1974—about 47 million pounds or \$8.9 million worth. Other minor items amounted to only about half that value.

China's agricultural exports to the United States in fiscal 1974 amounted to \$23.6 million, compared with \$19.6 million in the preceding year. These shipments included a wide range of specialty products with hog bristles ranking first at \$6.5 million. Raw silk shipments were valued at \$2.8 million, and essential oils and resinoids at \$2.5 million. Animal hair, feathers and downs, and gelatins each accounted for between \$1 million and \$2 million.

In the current year, ending June 30, U.S. agricultural exports to Asia will exceed those to all of Europe. The most dynamic growth in U.S. agricultural trade is with Asia—and has been for several years. The opening of the PRC to American trade has been important to that growth. By the same token, agricultural trade has been a major lever in opening the PRC once again to American commerce, travel, and exchanges of many other kinds.

With China having the laregst population in the world—a population that continues to expand and seek better living and improved food security—there is every reason to hope that American farm products might continue to find a growing market there.

# New Regulations Take Hold In U.S. Sugar Market

By KERRY E. REYNOLDS Trade Operations Division Foreign Agricultural Service

Since the U.S. Sugar Act expired last December 31, U.S. sugar growers and importers are functioning under a different set of rules and regulations. Far-reaching changes have been made in the system under which the United States purchases foreign sugar. Other legislative authority has replaced the expired Sugar Act as the basis for import regulation.

For domestic programs affected by the Act's expiration, actions to assist U.S. growers can still be taken under a number of existing U.S. laws. Although a new Sugar Act was proposed to replace the expiring legislation, it was defeated in the House of Representatives in June 1974.

Despite the many new conditions, no dramatic shifts are expected in the U.S.

"Long-term, the new system may also benefit U.S. consumers by facilitating the flow of sugar imports from efficient producers."

sugar market. The changes have taken place at a time when sugar prices are unusually high, and any changeover costs incurred by producers or refiners could be more easily absorbed.

Long-term, the new system may also benefit U.S. consumers by facilitating the flow of sugar imports from efficient producers. Brazil, for example, has recently had U.S. quotas of about 650,000 short tons, but has exported an additional 2 million short tons to the world market. This advantage will be even greater if U.S. refiners insure supplies by negotiating long-term contracts with foreign suppliers, as President Ford advised last November.

At present, the following laws and regulations prevail in the U.S. sugar market:

Tariffs and quotas. Last November 18—before the Sugar Act expired—President Ford issued a proclamation setting quotas and duty rates on U.S. sugar imports. Duties were retained at the Column 1 level (most-favored-nation rate) of between 0.6625-0.428125 cents per pound. If the President had not acted the duty would have snapped back to the full Column 2 rate which is almost three times higher.

In his proclamation, the President also established a global import quota of 7 million short tons. Unlike the quotas under the expired Sugar Act—which were on a country-by-country basis—the new global system will be on a first-come, first-served basis. The President has the right to make future adjustments either to the quota level or the duty rate—within certain limits.

U.S. sugar imports have been subject to quotas since 1934. Last year, sugar import quotas totaled about 6.8 million short tons, of which only about 5.8 million tons were actually imported. In recent years, the largest quotas have gone to the Phillippines, the Dominican Republic, Brazil, and Mexico. Until 1960, however, the majority of U.S. sugar imports came from Cuba.

The new quota system does not distinguish between raw and refined sugar imports, so that previous restrictions on refined sugar imports are ended. In the past, imports of sugar for direct consumption were virtually embargoed, except for minor quotas given to the Philippines, Ireland, and Panama—a total of approximately 65,000 short tons.

Imports of refined sugar are not expected to increase significantly this year, however, owing to the lack of refining capacity among the major exporting countries.

Confectionary quota. The confectionary quota, authorized by the Sugar Act, also expired on December 31. In 1974, this quota was 189.6 million pounds, including a chocolate crumb quota of

21.68 million pounds. The chocolate crumb quota, however, did not expire. Even though chocolate crumb is referred to in the Sugar Act as part of the total U.S. confectionary quota, it is also covered under Section 22 of the Agricultural Adjustment Act of 1933 and remains in effect in 1975.

**Exports.** U.S. producers remain free to export sugar. Although exports have not been restricted for a decade, they would have been prohibited if the 1974 Sugar Act had been passed by Congress. U.S. sugar exports, which traditionally go primarily to Canada, are relatively small, totaling only 63,000 short tons in 1974.

Cuban tariff preference. Cuban tariff preferences on sugar remain in the U.S. tariff schedules in a "suspended" status. The suspended rate is 0.53-0.3435 cents per pound. The proposed Sugar Act would have removed this preference so that duties would be equal for all developing country suppliers. Further, it is no longer needed for calculation of the special Phillippine rate. The Philippine rate, which ended when the Laurel-Langley Agreement expired on July 4, 1974, was keyed to the Cuban rate.

Cuban imports could resume, limited only by the 7-million-short-ton quota, should the President lift the present trade embargo with Cuba. The proposed Act would have allowed Congress to disapprove any Cuban quota restoration.

Resuming trade with Cuba and restoring the tariff preference are two separate actions. Thus, even if diplomatic relations with Cuba should be reestablished and the President uses his discretionary authority to resume trade, Cuban exports would not immediately be given preferred duty rates, but would be charged the higher Column 2 rates.

Before Cuba could again obtain duty preferences, the President would have to act under the Tariff Classification Act of 1962 to determine "that Cuba is no longer dominated or controlled by the foreign government or foreign organization controlling the world Communist movement."

Information gathering authority. The Sugar Act's reporting requirements. under which the U.S. Secretary of Agriculture has kept informed of domestic sugar market conditions, has also expired. Of course, he is still authorized by law to gather information and the Agricultural Marketing Act of 1946 and other legislation gives him the authority

to gather statistics on the marketing of agricultural commodities.

Domestic sugar quotas. The Secretary of Agriculture now has no authority to establish sugar quotas for domestic areas, including Hawaii, Puerto Rico, and the Virgin Islands. Such quotas, of course, existed under the expired Act.

**Price supports.** Direct support or compliance payments to U.S. sugar producers ceased after completion of the 1974 crop year. Payments were set on a graduated, decreasing scale based on the grower's production—the more produced, the lower the payment per ton.

Although price supports are an unlikely possibility at current prices, they could be made available under the Agricultural Act of 1949, at a level not in excess of 90 percent of parity. However, support would have to be carried out through loans, purchases, or methods other than direct payments to farmers.

Acreage allotments. Acreage allotments have ceased and domestic production is unrestricted. The Secretary could, however, re-establish price supports under the Agricultural Act of 1949—in which case he could enforce acreage restrictions by making them a condition of eligibility for price supports.

Excise taxes. An excise tax of 0.53 cents a pound on sugar manufactured in the United States and on imported refined sugar was also authorized by the Act. The tax, which has produced revenues at least as large as payments to producers, will terminate on June 30, 1975.

Wage protection. The Sugar Act required sugar growers to pay a "fair and reasonable" wage to workers. Annual minimum wages were set by USDA based on growers' anticipated prices, predicted income, expected cost of production, and probable cost-of-living increases for the workers. Annual minimum wage levels varied between geographical regions and between beet and cane workers. With the Act's expiration, wage regulations for sugar producers will come under applicable Federal statutes.

#### DANISH SUGAR OUTLOOK UNCERTAIN

Sugar production in Denmark from the 1974 harvest currently is expected to total 385,000 metric tons, according to a report from Fred W. Traeger, U.S. Agricultural Attaché in Copenhagen. This latest figure represents an increase of 10,000 metric tons from the October estimate.

Deliveries of beets have continued at a normal pace, even though this past fall was the wettest of this century. Refineries completed receipts in late December and early January, and were scheduled to finish processing by mid- to late January.

The production goal for 1975-76 has not yet been determined. The grower organization in Denmark, however, seeks an all-out production of 475,000 metric tons—a volume that would require maximum utilization of Denmark's 328,000 "A" quota (expanded from 290,000 metric tons in 1974-75), plus an additional 45 percent "B" quota.

In terms of export sales from current production, Norway is expected to buy 50,000 metric tons of Danish sugar in 1974-75, with most of the remaining 85,000 metric tons available for export being shipped to the United Kingdom.

Exports during October 1974, the latest month for which data are available, amounted to 21,975 metric tons. Breakdown of these exports (in metric tons) was: The United Kingdom, 17,767; Norway, 3,235; Ireland, 463; Faroe Islands, 197; Italy, 174; Greenland, 118; and others, 22.

Sugar prices in Denmark have remained stable. The wholesale price since the beginning of October has been DKr2.22 per kilogram (exfactory) delivered in 50 kg bags. The retail price (value-added tax inclusive) rose only slightly, from DKr3.04 in September to DKr3.14 per kg in November. (In October 1974, DKr6.028=US\$1.)

In early December the European Community Commission, in response to a heavy outflow of sugar from Denmark to Sweden and Norway during the fall, placed an export levy of DKr6.60 per kg on consumer sugar taken out of the EC.

# Bulgaria's Higher Farm Profits To Spur Food Outturns, Exports

By MILES J. LAMBERT Foreign Demand and Competition Division Economic Research Service

BULGARIA, the largest exporter of farm products in Eastern Europe, and the world's largest cigarette exporter, is pressing for improved profitability in its agricultural sector in a move to produce more and cheaper food for export as well as for domestic consumption.

Agriculture is a major element in the Bulgarian economy, accounting for 15 percent of gross national product, 40 percent of the country's labor force, and 45 percent of total export value.

About 80 percent of Bulgaria's farm exports—valued at more than \$1 billion annually—move to other Communist countries, with fruits, vegetables, and tobacco comprising the bulk of the shipments. Exports to Western Europe consist principally of grain and sunflowerseed oil.

Agricultural imports are chiefly Soviet cotton and Cuban sugar, but also include protein meal and significant quantities of citrus fruit and olives from Mediterranean countries.

Bulgaria, a country of 8.6 million people, has a varied topography that includes 11 million acres of arable land. However, over 70 percent of this area is endangered by erosion—20 percent severely so.

Regional soil deficiencies are accompanied by weather patterns that frequently include summer droughts, which can have serious effects on grain production and exports. The Danubian Plain in the north and the Thracian Plain in the south-central region are the most suitable areas for grain production.

The northern area also is important for the production of high-quality wine, while the emphasis in the south is on cash crops such as vegetables and tobacco. The extensive mountain regions are important in plum production and sheep-raising.

Long in the forefront among East European countries in the use of irrigation techniques, Bulgaria irrigates about 25 percent of its arable land—a critically important factor in the production of such crops as fruits, vegetables, and tobacco, and to a lesser extent in corn-growing, of which about 30 percent is under irrigation, and wheat, of which about 20 percent is on irrigated acreage.

Irrigation also has become an important technical-assistance resource that Bulgaria can employ when taking part in joint ventures located in arid developing countries, including the petroleum-exporting countries of the Mideast.

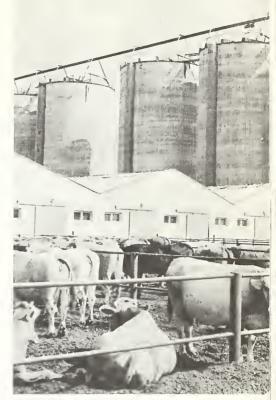
The underlying premise in agricultural organization in Bulgaria is not so much an ideological requirement for the consolidation of agriculture as it is the recognition of cost problems. The increasingly serious labor shortage imposes a need to bring forth maximum agricultural production from a dwindling number of workers.

There is also a need to eliminate subsidization of farm products for export caused by unsatisfactory productivity levels that hinder greater profit margins and thereby inhibit Bulgaria's competitive position in world markets.

THE ATTAINMENT of "bigness" in Bulgarian agriculture sets the country in sharp relief against other East European organization patterns. At present, there are about 170 agricultural-industrial complexes (AIC's), averaging 67,000 acres in size, that oversee cooperation between collective farms and State farms.

The AIC's, which were initiated in 1968, join production, processing, and trade organizations in complementary tasks, thus furthering the goal of specialization in lucrative, efficiently produced farm commodities. The innovative feature provided by the AIC's is the cooperative organizational ties between agricultural and industrial producers.

The sugar industry was vertically integrated into industrial-agricultural



Sleek dairy cows on a large farm installation in Cherven Bryag, in north-central Bulgaria.

complexes (IAC's) in 1972, and such organization may be extended to other sectors of agricultural production such as fruit and vegetable canning.

In the operation of these IAC's, farm activities are subordinated to and become one part of the industrial processing of sugarbeets

Seven IAC sugar complexes are in operation, all built around existing sugar refineries and linked through an association, Bulgarska Zahar. Essentially, all activities connected with sugar beet cultivation are appended to these complexes. For example, livestock feedlots using beet roots and sugar waste products as feed are attached to these IAC's.

The present trend is toward further consolidation through meshing the various organizations so as to permit greater central control. This also raises the danger of lower efficiency because of loss of control resulting from excessive size of the units.

Another prospective experiment in improving efficiency is the possibility of a joint Bulgarian-foreign firm venture involving direction of all AIC's in the Silistra District in northeast Bulgaria. The District has six AIC's, and the venture is intended to be a pilot project

on the feasibility of creating a Districtwide organization.

While providing a yearly breakdown, procurement of farm production has been and continues to be arranged on the basis of 5-year contracts.

Beginning in 1968, producer prices were increased on many items to bring them into line with world prices and to reduce the need for subsidies in the form of farm inputs.

This price problem may become even more urgent this year as the renegotiation of contracts with the Council for Economic Mutual Assistance (CEMA) approaches. Any significant increase in prices of raw materials and agricultural machinery will adversely affect the Government's ability to subsidize the agricultural sector of the economy.

The most recent changes in Government price policy occurred in June 1972, and stressed production of high-quality goods. Producer prices vary with quality, and foster specialization.

Pricing increasingly will be used to hasten that specialization by offering sure and high paying contracts. Prices will be more realistic in that they will be based on approximate cost (subsidies discarded), and will provide a greater profit margin to enable the purchase of more capital inputs.

The 1972 reforms also provide for payment of producer prices at the place of production, with the procurement agency assuming virtually all

of the various transportation costs.

Pricing policies thus combine with innovative organizational framework to stimulate specialization and the use of advanced technology in production of agricultural goods—particularly laborintensive crops such as tobacco, tomatoes, and grapes.

A striking feature of Bulgaria's agricultural trade is the country's dependence upon Eastern Europe and the Soviet Union as export customers, a situation that is particularly pronounced in the case of fresh and canned fruits and vegetables.

On the other hand, although Bulgaria has been a grain exporter for years, its exports of grain to those areas are comparatively rare and small in volume.

Bulgaria has a fast-growing greenhouse industry and is in a favorable position to export many high-quality fresh fruits and vegetables 9 months of each year; tomatoes can be shipped throughout the year.

Premiums vary with the time of delivery to the procurement agencies in order to smooth out the marketing year. Tomatoes account for about 70 percent of Bulgaria's fresh vegetable exports, with the remainder mostly green peppers, early potatoes, cucumbers, and cauliflower.

Since 1967, Bulgaria has averaged annual exports of 253,000 tons of fresh fruit and 248,000 tons of fresh vegetables. Exports of canned goods are



Tobacco workers (above) in southern Bulgaria hang threaded oriental leaf for sun-curing. Tomatoes (right), a major export item, are harvested by equipment of U.S. manufacture. Small dam (below) in mountainous western region near Sofia facilitates irrigation. The Soviet Union and Eastern European countries are Bulgaria's major export markets.



BULGARIA: CHANGES IN LIVESTOCK LEVELS AND MEAT PRODUCTION

Item	1967	1972¹	Change
Livestock:	Head	Head	Percent
Cattle	1,385,000	1,441,000	+ 4
Hogs	2,276,000	2,598,000	+14
Sheep	9,998,000	9,921,000	- 1
Goats	409,000	302,000	26
Poultry	23,637,000	34,788,000	+47
Meat:	Metric tons	Metric tons	Percent
Beef, veal	95,000	92,000	- 3
Pork	178,000	201,000	+14
Mutton, goat	86,000	88,000	+ 2
Poultry	62,000	108,000	+74

<sup>&</sup>lt;sup>1</sup> As of January 1, 1973.

BULGARIA: 1972 FRUIT AND VEGETABLE EXPORTS

Item	Exports	Imported by USSR, Eastern Europe
	Metric tons	Percent
Fresh vegetables	266,000	78
Of which, tomatoes	141,000	87
Canned vegetables	241,000	85
Fresh fruit	237,000	87
Of which, apples	54,000	93
Table wine	127,000	83









trending upward, with the rise of 56 percent in exports of canned vegetables since 1967 to 241,000 tons in 1972 being the most dramatic in the fruit and vegetable sector.

Despite Bulgaria's reliance on the Soviet Union and Eastern Europe as important markets, improvements are sought in canning, packaging, transport (including a specialized transport firm), storage, and additional ways of overcoming seasonality—all indicating avid interest in new markets, especially in Western Europe.

Greater mechanization possibilities also are being pursued: FMC Corporation was contracted to direct the growing of 1,700 acres of vegetables in 1974 in the Plovdiv District of southern Bulgaria, introducing new techniques and technology. In addition, the U.S. company has undertaken the development of a comprehensive 5-year plan for 143,000 acres in that model fruit and vegetable region.

Tobacco, although on a downward trend in volume of sales, continues to be one of the top earners among farm exports, netting \$77 million on shipments of 58,600 tons in 1972, of which 71 percent were destined for Soviet and East European markets.

Since oriental tobaccos are used in all fine cigarettes, Bulgarian tobacco complements the use of light Virginia tobaccos and can only be considered in marginal competition with burley and flue-cured types.

Also, some large-leaf Virginia and burley tobacco is being grown because those types are more suitable to the mechanized methods of cultivation in which Bulgaria is interested. In 1974, two U.S. tobacco firms were involved in a 75-acre burley experiment in the northwest.

Bulgaria has been striving to increase domestic consumption of meat and to widen its meat export markets. Neighboring Romania, by contrast, has sought to develop meat exports chiefly at the expense of domestic consumers.

Meat production has fluctuated—especially beef—but the general trend since 1967 has been upward because of increases in pork and poultry meat production.

Exports of live animals—except sheep—have declined, but value-added exports of meat—except poultry meat—have not increased significantly. In 1972, only 33,000 calves were exported, compared with 92,000 in 1968 and

a total of 45,000 exported in 1970.

Italy takes about 97 percent of calf exports. Once-large exports of swine, which prior to 1969 went chiefly to the USSR and Yugoslavia, had by 1972 dwindled to zero. Export of lambs has increased from 470,000 in 1967 to 705,000 in 1972, with Greece, Italy, and Libya the principal markets.

No official Bulgarian statistics on beef exports are available, but FAO data show a slow rise from 5,500 tons in 1967 to an estimated 7,100 tons in 1972. Sales of mutton and lamb have fluctuated between a low of 181 tons in 1968 and a high of 2,620 tons in 1970.

Bulgarian statistics show pork sales to be unsteady also, averaging 11,600 tons during 1967-72, with a high of 16,600 tons in 1968 (when Greece bought the unusually large quantity of 5,600 tons) and a low of 7,900 tons in 1970.

Prospects for increased sales of pork in Western Europe (chiefly Spain, Italy, and France), coupled with growing domestic demand, are encouraging the raising of more swine.

Poultry meat exports have gradually moved upward from 17,000 tons in 1967 to 26,000 tons in 1972. About 46 percent of those sales went to the USSR.

The Government budget has had to absorb the cost of trying to satisfy domestic and foreign market demand for meat at several stages of production. In attempting to produce more feed, more fertilizer—which is heavily subsidized by the Government—has been utilized. Nevertheless, rising needs for feed still cannot be met domestically, and the quantity and cost of meal imports have increased correspondingly.

Insufficient domestic supplies of feed are influenced by limited feedgrain yields, a traditional preference for sunflowers, limited oilseed crushing capacity, wasteful use of some feed crops, and labor inefficiencies.

A N ADDITIONAL drain in the Government budget results from the payment of high producer prices by procurement agencies without a compensatory rise in prices charged to consumers.

Despite feed production obstacles, several measures have been introduced or continued that should be effective in keeping livestock levels and meat production up in the face of world inflation—especially since Bulgaria is likely to remain relatively protected in farm inputs by its trade ties to CEMA and par-

Continued on page 16

# Sugar Prices Down in FAS Survey; Broiler and Dairy Prices Firmer

OUGAR PRICES fell sharply in 5 of 15 world capitals surveyed by FAS Attachés on March 5, but broiler and dairy prices strengthened and meat prices rose slightly in more than half the cities.

Sugar prices dropped by a substantial 34 percent in Washington between January 3 and March 5; Ottawa reported a 20 percent decline; Brasília, 8 percent; and Mexico City and Stockholm, 7 per-

In Bonn, Canberra, London, Rome, and The Hague, sugar prices increased. The large increase in the London price is attributed to the settlements reached between the European Community and sugar than under the now-defunct Agreement.

Sugar supplies and prices are expected to remain fairly stable in the coming months, in contrast to the fluctuations and shortages of late 1974 and early 1975. Sugar prices were unchanged in Brussels, Buenos Aires, Paris, Tokyo, and Copenhagen.

Government controls in Argentina apply not only to sugar but also to prices of broilers, pork, chuck roast, and cooking oil, causing all these com-

former Commonwealth Sugar Agreement countries, with the United Kingdom now obliged to pay a considerably higher price for Commonwealth cane

> Continuing mild weather and a seasonal spring laying flush have kept eggs reasonably low in price. In Brussels, egg prices declined 8 percent, mainly as a result of growing difficulties in export sales, but broiler prices increased nearly 4 percent, reaching their highest level since September 1973.

modities to remain at the early January

northern European countries is up. Eight of the 15 cities surveyed reported higher prices. In sharp contrast, egg

prices were down in 10 cities.

of rising production costs.

The major trend in broiler prices in

In the United Kingdom, a further rise

in broiler prices is blamed primarily on declining U.K. production as producers

cut back to maximize returns in the face

price level.

Cheese, butter, and milk were up in nine cities, with cheese showing the greatest increase. The Hague reports Gouda cheese significantly higher, mainly because of recent price increases for milk and milk products in the European Community.

In Paris, EC price increases in dairy products are already in effect. In London, increases in dairy prices reflect EC Council of Ministers' decisions and subsequent U.K. Annual Review determinations.

Slight meat price increases are reported for some better cuts in a majority of the cities surveyed. In The Hague, prices of beef and pork were higher. than those reported January 3, following firmer price trends on domestic livestock markets.

FOOD PRICE INDEX CHANGES IN SELECTED COUNTRIES

	Latest Index		Percent change from				
Country	month		Prev. month	Three months	One year		
Belgium	Feb	131.2	+1.2	+1.9	+10.7		
Brazil	Jan	258.9	+3.2	+6.5	+37.1		
Canada	Feb	156.9	+ .8	+2.6	+14.7		
Denmark	Jan	157.5	+ .4	+3.0	+12.6		
France	Jan	150.0	+ .7	+2.7	+11.9		
Germany	Jan	126.5	+ .9	+2.2	+ 4.2		
Italy	Jan	164.2	+1.5	+4.2	+24.3		
Japan	Jan	171.6	+1.0	+2.1	+18.0		
Mexico	Jan	175.5	+ .3	+2.7	+16.0		
Netherlands	Jan	139.4	+3.3	+5.4	+10.6		
Sweden	Jan	140.6	+ .5	+1.5	+ 7.3		
United Kingdom	Jan	183.0	+3.4	+7.2	+18.4		
United States	Jan	148.7	+ .7	+2.8	+11.1		

SURVEY OF RETAIL FOOD PRICES IN SELECTED WORLD CAPITOLS MARCH [In U.S. dollars per lb, converted at current exchange rates]

City	Steak, sirloin, boneless	Roast, chuck, boneless	Pork chops	Ham, canned	Bacon, sliced, pkgd.	Broilers, whole	Eggs, dozen	Butter	Cheese: Edam, Gouda, or Cheddar	Milk whole, quart	Oil, cooking, quart	Tomais
Bonn	4.16	2.86	2.36	1.74	3.75	0.81	0.91	1.57	1.82	0.41	2.47	0.3
Brasilia	1.27	1.12	1.63	2.23	4.15	.56	.75	1.36	2.29	.24	1.09	.3
Brussels	3.42	1.77	1.76	3.23	1.62	1.12	.90	1.69	1.92	.42	1.72	1.0
Buenos Aires <sup>1</sup>	.70	.29	.29	(²)	.89	.41	.48	1.38	1.27	.17	.45	.1
Canberra	1.30	.54	1.63	2.66	2.35	1.30	1.18	.91	1.45	.47	2.05	.6
Copenhagen	4.70	2.10	2.60	3.08	2.71	1.12	1.29	1.43	1.68	.39	<sup>3</sup> 2.61	1.4
London	2.92	1.53	1.65	1.56	2.04	.71	.90	.68	.95	.23	1.65	.8
Mexico City	1.23	1.16	1.52	2.88	1.79	.61	.83	2.08	3.01	.30	1.33	E.
Ottawa	1.88	1.18	1.65	1.88	1.41	.81	.75	.99	1.49	.52	1.60	.7
Paris	2.79	1.59	1.83	2.75	3.41	1.00	1.09	1.73	1.65	.35	1.80	3.
Rome	3.15	2.09	1.82	2.16	1.81	.94	1.08	1.82	1.48	.38	1.31	.€
Stockholm	4.73	2.08	2.25	3.36	2.67	1.51	1.33	1.41	2.31	.33	4.34	1.2
The Hague	3.64	2.50	2.17	1.92	3.08	.75	.97	1.46	1.78	.34	1.41	.51
Tokyo	16.00	4.48	2.88	4.30	3.52	.96	1.10	2.06	1.86	.66	1.65	.4
Washington	1.69	1.29	1.79	2.16	1.56	.59	.74	.89	1.94	.48	1.92	.e.
Median	2.92	1.59	1.79	2.44	2.35	.81	.91	1.43	1.78	.38	1.65	.€

<sup>&</sup>lt;sup>1</sup> Government ceiling prices are listed for meat. <sup>2</sup> Not available.

<sup>3</sup> Not commonly used for cooking.

A Rolls are the most comnin

This trend is reportedly a result of lower seasonal supplies of cattle and pigs for slaughter. In Brussels, current market prices for cattle and hogs are up. However, retail prices remain fairly stable, with price variations depending on type of cut.

Major price changes occurred for chuck roast, which was down 6 percent, and for cooked ham, which rose by 14 percent.

Higher retail prices for pork cuts in Ottawa are attributed to the decline in hog marketing—a trend that is expected to continue.

Bread prices increased in six cities, declined in three, and remained stable in six. On February 17, retail bread prices in London rose by 1.5 pence per standard 28-oz wrapped sliced white loaf. Government approval of the price hike was a result of price relief sought by the bakeries.

Cooking oil also advanced in price in some of the cities surveyed. A substantial increase in Stockholm results from an increase in supplier prices and discontinuance of the Christmas bonus price.

Considering seasonally adjusted prices, few changes occurred in fruits and vegetables. Oranges were the exception. As a result of short supplies in exporting countries, this commodity advanced in price more than is customary at this time of year.

The March survey reflects little change in rice prices in all 15 cities covered by the survey.

—By Sidonia R. DiCostanzo, FAS

ples	Oranges, dozen	Bread, white, pkgd.	Rice	Sugar
31.35	1.31	0.63	0.95	0.33
39.90	.43	.45	.25	.11
.29	.58	.29	.52	.29
1.22	.36	.21	.24	.18
.25	1.48	.37	.34	.16
.34	1.67	.55	.57	.27
8 .51	1.75	.22	.47	.37
3 .29	.28	.28	.39	.08
7.49	.99	.32	.58	.50
8 .35	1.56	.70	.39	.25
6 <b>.2</b> 8	.88	4.32	.29	.32
2 .41	1.10	.75	.54	.40
5 .22	.78	.24	.48	.28
4 .53	4.13	.47	.35	.44
6 .39	1.77	.48	.45	.52
.35	1.10	.37	.45	.29

### World Weather

In Europe, an unseasonably mild winter continued through February and on into mid-March. Freezing temperatures were rare, except in the extreme north and east portions. Lowest temperatures experienced, including European USSR, are not likely to have caused much winterkill of crops. Although there has been little or no snow cover in most of the region, it was adequate when and where cold weather occurred in Eastern Europe and the USSR. There is concern for fruit throughout Europe—the mild weather caused crops to advance at an unusually fast pace and they are prematurely vulnerable to frost.

After 5 very wet months in much of Europe, February and March have been relatively dry. An exception is the Mediterranean Basin, where rains have brought significant relief from the prolonged drought in many of the Basin's European and North African countries.

Rainfall has been less than usual for this time of year in Pakistan and most of India, where it is greatly needed. Shower activity picked up, however, over the eastern half of India during the second week of March. And a narrow belt running north-south through central India did receive beneficial February rains. Timely rains have favored crops in Argentina, southeastern Australia, and New Zealand.

Grain. February and March rains have brightened the dismal prospects for winter cereal throughout the western Mediterranean Basin. The rains have arrested prolonged drought in Portugal, Spain, Italy, Morocco, Algeria, and Tunisia. Though too late to save all winter crops (Morocco expects its worst winter wheat crop in 30 years), the increased moisture at least provides a better start for spring planting. Wheat prospects in most of the Mediterranean are still good, thanks to timely rainfall through the season.

Elsewhere in Europe, February to mid-March precipitation was heaviest where it was needed most, and minimal where it was needed least. Relatively dry weather west of the Volga permitted soils to dry out somewhat, and farmers made good progress in preparations for spring planting. Above-normal precipitation east of the Volga helped to make up for earlier deficiencies. Soil moisture remains low in Bulgaria.

Average temperatures were above normal in Europe, except in the European USSR, which was near normal. Severe cold, though not unusual, was limited to the USSR where snow cover was mostly adequate. Winterkill should not have been a major problem.

Crop reports from India are conflicting. There have been official tones of optimism about the Rabi (spring harvest) crop. But rainfall through the growing season has been below

normal in many key producing states including much of important northern India. February was quite dry in most of these states and there has been little to cheer about in March. Showers have picked up since March 7, but mostly in eastern states rather than in the major wheat producing states of the north.

In China's major wheat producing areas, late winter precipitation was rather light, but soil moisture is generally good from earlier precipitation. Furthermore, winter has been much more favorable than the dry and frequently cold conditions of last year, which should mean less winterkill.

Excessive rains have caused concern about coarse summer grains in South Africa and Rhodesia. No doubt some losses have occurred, but some industry members believe the rains will have an overall beneficial effect.

North American winter cereals have progressed well with few exceptions.

Other crops. The mild winter has fruit growers on edge in most of Europe. They fear an early bloom that would be prey to earlier-than-usual frosts, plus pest problems. Although rainy weather is needed for forage and cereal crops, it could hurt the almond fruit set. Recent rains have benefited pastures and fruit in Australia and New Zealand. Heavy rains relieved the drought in Peru's central Sierra, but caused some flooding, extending to the Acre region of Brazil.

# FAS Matches Buyers Abroad, U.S. Suppliers By Computer

By LLOYD R. WILLIAMS Export Trade Services Division Foreign Agricultural Service

WANT FRYER wings," the Hong Kong buyer said, "frozen, large three-jointed, yellow-skinned, unsevered, in regular container-load deliveries of about 36,000 pounds."

The U.S. Agricultural Officer noted the buyer's specifications, as well as his bank reference, terms of payment, complete address, and telephone number, and cabled the information to the U.S. Department of Agriculture in Washington, D.C.

At this point the Trade Opportunity Referral Service (TORS) staff checked the data with USDA commodity specialists and then fed the trade inquiry into a computer bank which prepared mailings to 128 suppliers of chicken parts.

Within a short time, 20 U.S. companies had responded to the trade inquiry and the Hong Kong firm had made an initial purchase of \$15,000 worth of fryer wings.

This sale was one of 61 totaling \$9,486,547 known to have developed out of TORS "matchmaking" during 1974. Other sales are reportedly being

negotiated. Still others will never be revealed because of the reluctance of buyers and sellers to divulge information.

TORS was started by the Foreign Agricultural Service in 1971 as a means of bridging the communication gap between foreign buyers and U.S. sellers. Framework of the system is a computerized listing of foreign customers and U.S. suppliers, broken down into 400 separate commodity categories. When, for example, USDA wants to find suppliers of chicken parts, the computer is asked to list the names under SIC (Standard Industrial Code) 20151025.

Foreign buyers for chicken parts and other agricultural products can also be found in a similar manner.

Suppliers are periodically surveyed for TORS by export representatives of the State Departments of Agriculture. These State specialists help keep the list current and provide backup assistance to export firms in their States.

Foreign firms are surveyed under contracts made by agriculture attachés with local firms in more than 50 countries. The attachés provide on-the-spot assistance to the program. TORS has listings of 6,537 foreign buyers by country and 3,040 U.S. suppliers by States.

The largest number of overseas firms surveyed are located in Europe (3,527), followed by the Middle East (1,400), the Far East (936), and Latin America (674). Belgium, with its 602 firms, leads all other European countries; Saudi Arabia leads in the Middle East, Hong Kong in the Far East, and Colombia in South America.

Seven States have 100 or more surveyed firms included in the computer bank. California leads with 370, followed by Texas (268), Ohio (245),

New York (233), Illinois (153), Pennsylvania (135), and Wisconsin (132).

TORS listings have many important uses in addition to transmission of trade inquiries. American exporters use commodity listings of foreign buyers for surveys and direct mail advertising for their products. Planning and implementation of programs to solicit firms for overseas food promotions are built around TORS lists. Foreign firms often use the lists to make individual contacts with U.S. suppliers.

Over 1,600 trade inquiries were processed and distributed through TORS during 1974. Trade leads are generally for standard items such as grains, vegetable oils, fresh and processed foods; but oddities often appear such as turkey feathers for the production of arrows, ant eggs for feeding zoo animals, ginseng and groundup reindeer antlers as aphrodisiacs, and four-leaf clovers for use in novelty items.

The TORS computer short-circuited (figuratively) on the four-leaf clovers, but three U.S. sources were eventually found for a sale of 250,000 of the lucky emblems to a Copenhagen concern.

#### Are You Interested?

U.S. exporters who wish to utilize the TORS system to locate foreign customers for their products should contact the TORS Coordinator, Export Trade Services Division, FAS, U.S. Department of Agriculture, Washington, D.C. 20250, phone (202) 447-7103, or the export representative in their State Department of Agriculture.



Left, Lloyd R. Williams, TORS Coordinator, looking on as data are fed into the computer. Below, a mailout prepared by the computer and sent to TORS subscribers.



# Nigerian Wheat Imports Curbed By High Prices; New Import Growth Seen

By ODIGIE ONIHA Office of U.S. Agricultural Attaché Lagos

Braked by rising prices and slack-ened consumer demand, Nigeria's leading agricultural import—wheat—has shifted in the last 2 years from rapid expansion to stagnation. However, mounting oil revenues and incomes are laying the basis for resumption of growth, with any added benefits likely to go to the United States, far the largest supplier of wheat to Nigeria.

The import slowdown began in 1972, which, although a peak year, saw wheat purchases gain only marginally after having more than doubled between 1966 and 1971. From the 1972 record of 397,000 metric tons, they slipped the following year to 395,800 tons valued at \$34.9 million and through late 1974 were barely holding at the 1973 levels (full-year data are not yet available). As in the past, the United States supplied the bulk of these imports—338,600 tons in 1973—with Canada making up most of the remainder.

This recently sluggish trade contrasts dramatically with the wheat market of the late 1960's, when supplies literally could not keep up with burgeoning demand for wheat products. The spurt in demand came with the civil war of 1966-69, which saw many consumers and large military forces, out of necessity, shift from traditional staples of cassava and yams to bread and other wheat products. The new products rapidly caught on, and in the early 1970's milling capacity was hard pressed to satisfy demand.

In response, the country's first flour mill, established in 1962 with an initial capacity of 600 tons a day, expanded its facilities to its current capacity of 2,200 tons per day—reputed to be the largest in the world. Additionally, three new flour mills began operations, and another is slated to start production in 1975; their total milling capacity is estimated at some 1,350 tons per day, which can be readily expanded if the need arises.



But just as their added capacity began coming on stream, the flour mills found themselves caught in a cost-price squeeze. The squeeze, which was eventually to leave them with fewer customers and excess capacity, began with the rise in world wheat prices since 1972. This upset a domestic marketing system based on duty-free imports of wheat plus controlled ex-mill flour prices. Following several petitions to the Govern-

A bread vendor in Lagos. Nigerian bread consumption has risen rapidly in the last decade, although this growth has recently been curtailed by the high world market prices for wheat.

# U.S. '75 Farm Export Outlook Clouded by Uncertainties

By ARTHUR B. MACKIE and HENRY C. TRAINOR Foreign Demand and Competition Division Economic Research Service

E XPORTS OF U.S. farm products, which were valued at a record \$22 billion in calendar 1974, may approach this record in calendar 1975. However, this year's outlook is clouded by such uncertainties as sluggish economic conditions throughout the world, the tenuous nature of crop predictions in major producing areas, and the need for many countries to rebuild their stocks of important feedgrains and oilseeds.

The future role of U.S. farm exports in world agricultural trade will hinge largely on the rapidity—or lack of it—of economic recovery in Western Europe and Japan in the short run, and on the success of developing countries in increasing their agricultural production in the long run.

Economic growth in developed countries will affect export sales of U.S. feedgrains and soybeans, while U.S. wheat and rice exports will be heavily influenced by future expansion in the developing and centrally planned economies.

A combination of world events of the past 3 years—highlighted by major crop shortfalls, rapid economic growth and inflation, monetary instability, and rapid growth in demand for U.S. farm products—has lifted the U.S. share of world agricultural trade to its highest level in a quarter of a century—16.5 percent in 1973 and probably an even greater share in 1974.

At this level, the U.S. market share was up more than 3 percentage points from the 13.3 percent of the 2 previous years and almost 3 percentage points above the 1966-70 average of 13.7 percent.

The previous high for U.S. market share occurred in 1966, when it reached 15.3 percent as a result of major crop shortfalls in the Asian subcontinent. Large shipments of U.S. grain, primarily to India, were made at that time.

The U.S. market share of world agricultural exports had been fluctuating

around 13 to 14 percent for 24 years until the rapid increase that occurred in 1973. Except for the period 1968-72, when the U.S. portion of world agricultural trade decreased slightly, the U.S. market share has trended steadily upward from a low point of 10.8 percent in 1953-55.

For example, the U.S. percentage share increased from 11.9 to 13.4 between 1951-55 and 1956-60 and to 14.6 percent in 1961-65 before declining slightly to 13.7 percent in the 1966-70 period.

The recent low of 12 percent in 1969 can be considered abnormal, since it was heavily influenced by the dock strike that held the volume of U.S. exports in that year to well below the average level for all other years of the 1966-70 period.

In retrospect, it appears that the years 1967-69 may have been exceptionally low years for U.S. agricultural exports, both because of the impact of the dock strike and the Green Revolution in developing countries that greatly reduced their grain imports from the United States and other major grain producing countries.

For example, during the 7-year span 1965-1972, India expanded its wheat production from 11 million to 27 million tons, an increase in a major crop unmatched by any other country in the history of wheat production.

THE RAPID GROWTH in production of agricultural products in many developing countries during this period greatly reduced their total import demand for food products. For example, wheat imports by Bangladesh, India, Indonesia, Pakistan, and Sri Lanka were reduced by half—from 9.2 million tons in 1965-67 to 4.6 million tons in 1970-71.

The recent upward trend in U.S. agricultural exports began in 1970 when value rose to nearly \$7.25 million. In

recent years, U.S. agricultural trade hit new records in each successive year—\$7.69 billion in 1971, \$9.2 billion in 1972, \$17.7 billion in 1973, and \$22 billion in 1974.

During this recovery period, thriving markets for soybeans and feedgrains in Japan and in the European Community greatly contributed to boosting U.S. agricultural trade. As export markets began to recover, soybeans and feedgrains led the way.

In 1972, for example, more than \$2 billion worth of U.S. soybeans and products were exported—the largest single item in value in all U.S. foreign trade, including such glamour export items as aircraft and computers. In the early 1970's, cash purchases—rather than P.L. 480 transactions—of U.S. farm products by wealthy nations was in fact exactly the kind of trade the U.S. agricultural economy had been seeking.

ARGE PURCHASES by the USSR of wheat and feedgrains in 1972—as well as shortages of some agricultural products—contributed to the exceedingly large export volume of U.S. agricultural products at record price levels

In 1973-74, purchases by the USSR—formerly an exporter of wheat—were reduced considerably. However, export markets for U.S. products expanded in East Europe and in the People's Republic of China—in the latter case rocketing to about \$852 million in 1974.

In addition, Japan and the EC continued to be extremely important customers, with Japan importing \$3.4 billion worth of U.S. farm products and the EC \$5.3 billion worth.

Another major factor responsible fo the recent trends in U.S. market share of world agricultural trade has been grain exports—both food and feed grains. Soybeans and products also have been influential during the past 5 years but grains have been clearly the leading commodity in setting trends since 1950

Of the grains, wheat exports have been the most accurate barometer of the actual level of U.S. exports as well as of the market share. The trend in the U.S. market share of world agriculturate trade has been closely related to the role of the United States in world wheat exports.

For example, the United States ir creased its share of world wheat export steadily from 1954 through 1966, a did the entire U.S. share of world agr.

cultural trade. When the U.S. market share for wheat exports declined in 1967-72, so did the role of the United States in world agricultural trade.

The resurgence of U.S. wheat exports

from 35.4 percent of world wheat exports in 1972 to 45 percent in 1973 was sufficient to increase the U.S. role in world agricultural trade from 13.3 to 16.5 percent.

U.S. MARKET SHARE OF WORLD AGRICULTURAL EXPORTS INCREASES, 1973 AND 1974

Year .	Agricultur	al exports 1	U.S.	Agricultural share of total	U.S. share of world	
Teal	World	U.S.	share	U.S. exports	Wheat	All grains
	Bil.	dol.	Percent	Percent	Per	rcent
1950	20.60	2.87	13.9	28.3	32.1	30.5
1951	27.63	4.04	14.6	27.1	44.2	42.7
1952	26.58	3.43	12.9	22.8	42.4	35.3
1953	26.67	2.85	10.7	18.2	30.2	27.9
1954	27.89	3.05	10.9	20.3	26.0	20.9
1955	28.76	3.12	10.8	20.2	28.2	29.3
1951-55 Avg	27.50	3.30	11.9	21.7	35.2	31.2
1956	30.79	4.17	13.5	22.0	38.1	34.4
1957	31.74	4.51	14.2	21.8	35.2	32.0
1958	29.83	3.85	12.9	21.7	34.8	37.1
1959	31.80	3.95	12.4	22.6	34.7	38.6
1960	33.95	4.83	14.2	23.7	40.7	38.7
1956-60 Avg	31.62	4.26	13.4	22.3	36.7	36.2
1961	34.61	5.02	14.5	24.1	43.1	38.8
1962	35.25	5.03	14.3	23.4	38.1	40.7
1963	38.85	5.58	14.4	24.1	40.8	41.1
1964	41.58	6.34	15.2	24.1	39.3	39.8
1965	42.68	6.23	14.6	22.9	34.8	40.5
1961-65 Avg	38.59	5.64	14.6	23.7	39.2	40.2
1966	45.03	6.88	15.3	22.9	39.2	44.5
1967	44.82	6.38	14.2	20.4	35.6	38.6
1968	45.59	6.23	13.7	18.2	33.6	37.9
1969	49.34	5.94	12.0	15.9	28.3	33.7
1970	53.77	7.26	13.5	17.0	33.4	35.6
1966-70 Avg	47.71	6.54	13.7	18.9	34.0	38.1
1971	57.93	7.69	13.3	17.7	30.0	30.6
1972	70.79	9.40	13.3	19.2	35.4	40.0
1973	107.00	17.68	16.5	25.6	45.0	46.9
1974 (Prel.) .	130.00	22.03	16.9	22.5	39.9	40.2
1971-74 Avg	91.43	14.20	15.5	21.9	37.6	39.4

 $<sup>^{1}</sup>$  Includes SITC Sections 0, 1, 2, and 4, but excludes divisions 03, 24, 25, 27, and 28.

#### CANADIAN FLUE-CURED PRICES STILL DECLINING

Growers' prices for the 1974 Ontario flue-cured tobacco crop continue to decline. The season average price was 92.29 Canadian cents per pound on March 5, down slightly from 92.37 cents per pound in mid-February. Of the 236 million pounds forecast for the 1974 Ontario flue-cured crop, 162 million pounds—nearly 70 percent—have been sold.

Dissatisfied with leaf prices since auction markets opened last fall, Ontario growers are now more likely to implement the proposed reduction in 1975 crop production targets. This is especially true in view of the

1974 crop's persistently disappointing auction market returns, which apparently are due to an unforeseen decline in sales for export.

Export demand may continue soft for the 1975 Ontario flue-cured crop (to be planted in late spring) as Canadian tobacco loses Commonwealth preferential access to its major export market, the United Kingdom. Alinement of the U.K. tariff with the European Community tariff will be phased in over the coming 2 years.

Leaf production targets are to be set in April on the basis of estimates by growers and manufacturers.

# World Bank Plans To Boost Lending For Agriculture

The World Bank is planning a significant increase in its lending for assistance to agriculture and rural development over the next 5 years. Plans call for provision of \$7.2 billion for this purpose, about half of which will be for rural development.

By 1980, the Bank expects to be lending \$1 billion annually for rural development—about double the present rate of lending. The plans, outlined in a new Bank publication, "Rural Development: Sector Policy Paper," constitute a central part of the Bank's efforts to direct its assistance increasingly to the poorest among countries and peoples, and to help spread the benefits of development more widely.

The publication notes that nearly 800 million people live in poverty—about 85 percent living in what World Bank President Robert S. McNamara describes as "a condition of life so degrading as to insult human dignity." The rural poor include small-scale farmers, tenants, sharecroppers, landless workers, and their families.

To reduce poverty, the report states, rural development programs must be clearly designed to increase production and raise productivity. Poor farmers should have access to suitable technology and to the capital required to use the technology.

Improved food supplies and nutrition, together with basic services such as health and education, can not only directly improve the physical well-being and quality of life of the rural poor, but can also directly raise their productivity and their ability to contribute to the national economy.

The World Bank, the report emphasizes, recognizes the high priority of food production, and looks upon the need to reduce poverty in rural areas and to increase food production as twin goals.

The emphasis in its agricultural lending, therefore, includes lending not only for the rural poor but also for other farmers when it is necessary to raise their production in order to increase domestic food supplies and/or contribute to exports.

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#### Bulgaria's Higher Farm Profits To Spur Food Outturns, Exports

Continued from page 9

ticularly to the Soviet Union.

These measures consist of continued high producer payments, attempts to harvest at least two forage crops on irrigated areas, bringing of unused, poorer soils under cultivation for certain types of forage, organizing feed production within the new sugar IAC's, incentive measures to increase the role of private plots in livestock production (virtually ignored until 1970), loans and bonuses for livestock breeding in mountainous areas, promotion of cowcalf operations in those areas, and premiums paid in feed for specified levels of tobacco and animal products delivered.

It appears that livestock production has been assigned such a degree of priority that the drive for specialization, encompassing regional cost differentials, will not affect it for the foreseeable future, and animals will be raised wherever practicable.

Bulgaria generally is an appreciable exporter of grain, averaging exports of 600,000 tons in 1967-72. Bulgarian statistics show that wheat exports have varied from 534,000 tons in 1967 to 211,000 tons in 1970 and 509,000 tons in 1972. Corn exports have gone from 306,000 tons in 1967 to 124,000 tons in 1968 and to 285,000 tons in 1972.

Reliance has been on Soviet strains of wheat, especially drought-resistant Bezostaya 1, but experimentation also has taken place in crossing Italian, French, and Bulgarian varieties. Corn and barley comprise the main feed crops—barley being most common in the driest areas, such as in the northeast.

O VERALL meal and oil demand in Bulgaria is growing, but the structure of oilseed production is such as to leave a protein-meal deficit. Oilseed production is concentrated on sunflowers. In 1973, sunflowerseed outturns amounted to 434,000 tons, compared with 494,000 tons in 1972.

The level of producer prices for sunflowerseed is graduated, increasing with higher oil content. Such a price scale indicates a priority for the supply of vegetable oils to domestic consumers and foreign importers.

The drought resistance and high oil content of sunflowerseed has caused

Bulgaria to emphasize this commodity more than soybeans in the post-World War II period taken as a whole. Since sunflower yields less and lower quality meal, a higher level of protein meal imports is needed than would be the case if more soybeans could be cultivated.

While meal imports have cost Bulgaria increasing sums, a trade surplus has thus far continued to be shown for all sales and purchases of oilseeds and their products.

Because of lower 1973 and 1974 production, it is likely that Bulgarian exports of oilseed products will be down in volume in 1974-75. Exports of oilseeds have been banned since mid-1974.

Bulgaria's oilseed crushing capacity is currently underutilized because of less-than-optimum harvest results. However, importation of oilseeds would not be profitable. Since the additional oil that would result is not required for domestic use, Bulgaria has found it more advantageous to fill its growing protein meal deficit with increasing oilseed meal imports rather than oilseeds.

According to data published by the United Nations Food and Agriculture Organization, imports of oilseed meal have risen steadily from 52,000 tons in 1967 to 126,000 tons in 1972. Soybean meal has been obtained variously from Brazil, the United States, and West Germany (produced from Brazilian or U.S. soybeans); peanut meal (from India); and sunflower meal (probably from Turkey). The percentage of soybean meal, which now comprises about half of meal imports, has increased more than other shares.

Bulgaria hopes to increase soybean production (which amounted to 13,000 tons in 1972), and has succeeded in encouraging acreage increases from about 34,000 acres in 1972 to about 75,000 acres in 1973.

However, in addition to the reasons favoring sunflowerseed production, poor results in soybean outturns in the late 1940's have engendered some resistance among producers to expanding areas sown to this crop.

As for U.S.-Bulgarian trade, in 1973 \$3.2 million worth of Bulgarian agricultural exports went to the United States, consisting largely of cheese, rose oil, spices, and prunes. The possibility of

significant tobacco imports hinges largely on the granting of most-favored-nation (MFN) status by the United States to Bulgaria; a \$17 million purchase has already been cleared for shipment pending the granting by the United States of MFN status to Bulgaria.

U.S. exports to Bulgaria in 1973—typical of recent years—were valued at \$2 million, of which about \$1.4 million value was in dairy breeding cattle, with cattle hides and dried beans accounting for the remainder. In the first 10 months of 1974, dairy breeding cattle were again a significant U.S. agricultural export to Bulgaria, earning about \$700,000 for U.S. exporters.

T HE LEVEL of Bulgarian feedgrain and oilseed meal imports from the United States will depend on Bulgarian crop and livestock production, respectively.

Following drought years, there should be possibilities for sales of grain. Grain is normally purchased from the Soviet Union in such circumstances. After the particularly adverse harvest of 1974, Bulgaria received 300,000 tons of feedgrains from the Soviet Union, lesser quantities from other East European countries, and 64,000 tons of corn from the United States in the latter half of 1974. The purchase from the United States was valued at \$10 million, and constitutes the first significant American feedgrain sale to Bulgaria since 1965.

Also in late 1974, about 16,000 tons of soybean meal were obtained from the United States at a cost of about \$3.2 million. If increases in livestock production proceed and increased soybean production does not materialize, there should be chances for soybean meal sales to Bulgaria by the United States.

In seeking to maximize their hard currency reserves, the Bulgarians are prepared to watch for optimum trading times with non-CEMA countries. In the past, they have shown initiative in utilizing a full spectrum of financing arrangements for oilseed meal, though not with the United States. Yet the need for adequate protein meal for the livestock levels Bulgaria is determined to sustain will be the decisive factor even in purchases from the United States, as the 1974 sale indicates.

# **CROPS AND MARKETS**

#### **GRAINS, FEEDS, PULSES, AND SEEDS**

#### Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

Item	Mar. 25	Change from previous week	A year ago
	Dol.	Cents	Dol.
	per bu.	per bu.	per bu.
Wheat:			6.70
Canadian No. 1 CWRS-13.5.	4.93	+2	6.79
USSR SKS-14	(1)	(1)	(1)
Australian FAQ <sup>2</sup>	(1)	(1)	(1)
U.S. No. 2 Dark Northern			
Spring:	4.00	. 0	5.72
14 percent	4.80	+9	
15 percent	5.00	+8	(1)
U.S. No. 2 Hard Winter:	4 55	. 11	E 70
13.5 percent	4.55	+11	5.78 7.57
No. 3 Hard Amber Durum	6.94	+24	
Argentine	(1)	(1)	(1)
U.S. No. 2 Soft Red Winter.	(,)	(1)	(1)
Feedgrains:	0.00		2 62
U.S. No. 3 Yellow corn	3.33	+7	3.63
Argentine Plate corn	3.94	+16	3.91
U.S. No. 2 sorghum	3.18	+9	3.48
Argentine-Granifero			0.40
sorghum	3.14	+8	3.40
U.S. No. 3 Feed barley	2.96	<del>- 14</del>	3.16
Soybeans:	6.40	. 20	7.05
U.S. No. 2 Yellow	6.40	+39	7.25
EC import levies:	1 01	1	^
Wheat	1.31	-1	C.
Corn	.83	+2 6	0
Sorghum	1.05	6	0

Not quoted. <sup>2</sup> Basis c.i.f. Tilbury, England. NOTE: Price basis 30- to 60-day delivery.

#### World Wheat, Oats, Corn Crops Down in 1974; Rye, Barley Up

World wheat production in 1974 is estimated at 346.8 million metric tons, 5 percent less than the record 1973 crop of 366.5 million tons, but 7 percent above the 1968-72 average. World wheat area increased 2 percent over the 1973 total, while average wheat yields dropped to 15.6 quintals per hectare, the lowest since 1970.

Asia, Oceania, South America, and the Soviet Union all showed production declines for 1974. The Soviet crop of 83.8 million tons was down 24 percent from the record 1973 crop, and was 8 percent less than the 1968-72 average.

U.S. production increased 5 percent to 48.8 million tons, surpassing the record 1973 harvest of 46.4 million tons. Area increased by 22 percent, but the potential production increase was partially offset by a 14 percent decline in yield.

Production during 1974 in Argentina currently is estimated

at 5.1 million tons, down 22 percent from that of 1973. The Australian crop of 11.7 million tons is estimated at 3 percent below that of a year earlier. Total European production of 89.8 million tons is 9 percent greater than 1973 production.

World rye production, estimated at 32.7 million metric tons in 1974, increased by 13 percent over the 1973 crop of 28.9 million tons. World area increased 14 percent, while yield remained about constant.

The 1974 Soviet harvest of 15.2 million tons was a 41 percent increase over the previous crop and the largest outturn since 1965. The Soviet crop accounted for 47 percent of world production in 1974.

Canadian production increased 34 percent, while U.S. production fell 27 percent. West European output increased slightly from 4.7 million tons in 1973 to 4.8 million tons in 1974, while East European production declined from 11 million tons in 1973 to 10.8 million tons in 1974.

World production of oats in 1974 was 50.2 million metric tons versus 53.7 million tons in 1973. Acreage and yield both fell in 1974, by 4 percent and 3 percent, respectively.

Total North American production was down 12 percent, with U.S. production falling from 9.7 million tons in 1973 to 9 million tons in 1974. Soviet production was 15.3 million tons, 13 percent less than the record 1973 crop, which totaled 17.5 million tons.

Total European production increased from 17.9 million tons in 1973 to 18.8 million tons in 1974.

World barley production in 1974 is estimated at 157 million metric tons compared with the 1973 output of 156.1 million tons. While area increased 1 percent, yield decreased from 19.4 quintals per hectare to 19.2 quintals per hectare.

Barley production in North America decreased 21 percent to 15.5 million tons. A decrease in acreage of 11 percent, and a 10 percent decline in yield combined to cause the decline in production. The Soviet crop of 54.2 million tons was also down in 1974, by 2 percent.

Both Eastern and Western Europe, as well as Africa, Asia, and Oceania, reported increases in production. Australian production of 2.6 million metric tons was 8 percent greater than the 1973 crop. Total European production of 60.7 million metric tons was 6 percent above the 1973 figure.

World **corn** production for 1974 is now reported at 279.2 million metric tons, a 10 percent decline from the 1973 record crop of 311.6 million tons. A 12 percent decrease in yield, from 27.3 to 23.9 quintals per hectare, offset the 3 percent increase in world acreage.

Corn production in North America was down 17 percent from the 1973 level. U.S. corn production in 1974, 118.1 million metric tons, was down 18 percent from the 1973 record crop of 143.4 million and 5 percent below the 1968-72 average of 124.5 million. U.S. area increased from 25 million hectares in 1973 to 26.4 million in 1974, while yields declined over 20 percent to 44.8 quintals per hectare— the lowest since 1964. Production in Canada during 1974 was down 8 percent and Mexican production was down 14 percent.

Only Asia, Oceania, and South America anticipated increases in corn production in 1974. Total South American production is estimated to be up 4 percent from 1973. Production of Australia and New Zealand is expected to reach 320,000 tons, a 23 percent increase.

#### New Zealand To Export Corn and Barley

With a corn surplus estimated by most sources at 70,000-80,000 tons, New Zealand plans to export corn. Barley also is in surplus. The extent of the surplus is undetermined at this time, but some export sales have already been made. New Zealand normally does not export corn or barley.

#### Algeria's Wheat Estimate Down Sharply

A severe drought has adversely affected wheat production over much of Algeria, and current expectations reportedly are that the 1975 crop will be substantially below the output level in 1974, itself a poor year. Wheat production in 1975 is currently estimated at about 700,000 metric tons, compared with an estimated 850,000 tons in 1974. With annual wheat requirements of about 2.5 million tons, Algeria would be expected to import almost 2 million tons during the 1975-76 marketing year.

#### Pakistan Wheat Prospects Improve

Prospects for Pakistan's 1975 wheat crop have improved significantly because of generally favorable weather since January and because of no unusual pest or disease problems to date. Based on provincial estimates, a wheat crop of 6.8 million tons would be indicated at this time, but unofficial estimates are ranging up to 7.3 million tons. Wheat production totaled 7.5 million tons in 1974.

In addition to the widespread and ample rainfall over most wheat producing areas, the severe shortage of irrigation water in October-January was offset to some extent by stringent water control, reduced acreage, increased use of fertilizer, and better seed.

#### Argentina Increases Grain Support Prices

Grain support prices in Argentina have been increased by 36-49 percent for 1974-75 coarse grains and by 28 percent for 1975-76 bread wheat. The new prices per 100 kilograms, based on an exchange rate of 9 pesos=US\$1, are as follows, with old prices in parentheses:

	Pesos	U.S. dollars
Flint corn	91 (67)	10.11 (7.44)
Dent corn	87 (63)	9.67 (7.00)
Semi-dent corn	89 (65)	9.89 (7.22)
Sorghum	80 (58)	8.89 (6.44)
Millet	61 (41)	6.78 (4.56)
Bread wheat	125 (98)	13.89 (10.89)

#### Denmark's Grain Consumption Down

Denmark's grain consumption has fallen sharply during the current marketing year, while stocks as well as exports have increased substantially. As of early January, grain stocks were 4.6 million metric tons, or 1 million more than at the same time in 1974. The increased stock level would indicate that

grain disappearance during August-December 1974 was 20 percent lower than in the like period of 1973.

The revised consumption estimates in turn would increase the availability of exportable grain from the 1.1 million tons previously estimated for 1974-75 to about 1.6 million tons. Much of this surplus, however, will probably move into intervention, although exports rose by 400 percent during August-December 1974. Lower grain consumption is attributed to reduced hog feeding (hog slaughter was down 7 percent), record warm weather during the fall and winter, and relatively cheap protein meals.

# EC Reduces Estimates Of Feed Use Of Grain

In its latest review of the grain situation for the current marketing season, the European Community has sharply reduced its earlier estimates of the quantity of wheat that will be used for feed. In addition, its estimate of total feed use of grain appears to be revised downward by about 1 million tons. The previous estimate of feed use of wheat was 9 million tons, compared with 6.5 million in 1973-74. The new estimate for 1974-75 is only 7.5 million tons.

In making these revisions, the Community thus far has not increased its export estimate for wheat. The current projection stands at 7 million tons, as carried in the previous review.

#### Colombia May Export Rice to Cuba

Incomex, Colombia's Foreign Commerce Institute, foresees increased trade with Cuba, following resumption of diplomatic relations with that country, which had been broken off 13 years ago. Incomex expects rice to be a leading export to Cuba. Colombia currently has surplus stocks of rice that it has not been able to move successfully into the export market. Milled rice production for 1975 is estimated at 1.1 million metric tons. During the current year Colombia has exported about 4,000 metric tons of rice to Bolivia.

One of the reasons the grain trade gives for this sluggish movement is that quoted prices are too high. Colombia reportedly has been asking between US\$400 and \$420 per metric tons f.o.b. for CICA-4 and IR-22 with 15 percent brokens. One source estimates that Colombian rice exports to Cuba will amount to 40,000-60,000 metric tons, with shipment after July 1975.

#### OILSEEDS AND PRODUCTS

#### World Soybean Production Down in 1974

World soybean production in 1974 currently is estimated at 51.5 million metric tons, 10 percent below 1973's record large volume of 57.4 million tons despite a larger 1974 acreage. The 1974 U.S. production estimate at 33.6 million tons was down by 20.3 percent from the previous year's output. Brazil's 1974 production estimate, however, at 7.4 million tons was 48 percent above 1973's output.

On a meal basis, world soybean production in 1975 is estimated to decrease by 5.04 million tons to 35.6 million tons. However, world exports of soybeans and meal in 1975 are

expected to increase by 1.2 million tons to 21.65 million tons. This expansion is only about half the expansion achieved in 1974.

On an oil basis, world soybean production in 1975 is estimated to decrease by 1.12 million tons to 7.93 million tons. But world exports of soybeans and oil are expected to increase by 130,000 tons to 3.96 million tons. This increase will be largely because of greater Brazilian soybean oil exports.

#### World Peanut Production Up in 1974

World production of peanuts during 1974 is estimated at 17 million metric tons in shell, 3.7 percent, or 600,000 tons above the revised 1973 outturn of 16.4 million tons. Production increased in Africa and the United States but declined in Asia and South America. Crushing of peanuts is forecast to increase in 1975, boosting output of peanut oil and meal from the 1974 crop to 3.2 and 3.8 million tons, respectively.

In 1975, world exports of peanuts and oil (oil basis) are expected to be 790,000 tons—20 percent, or 132,000 tons, above 1974's estimated trade volume of 658,000 tons. Exports of peanuts and meal (meal basis) in 1975 are forecast at 1.8 million tons—14 percent, or 225,000 tons, above 1974's estimated exports of 1.6 million tons. Exports of peanut oil and meal in 1974 were the lowest in 15 years.

#### LIVESTOCK AND PRODUCTS

#### Australian Meat Board May Subsidize USSR Sale

The Australian Meat Board's recent decision to sell beef to the USSR at US\$700 per metric ton, c.i.f., may result in subsidy payments by the Board in purchasing the necessary numbers of animals. Bullocks have been selling in Australia at about US\$8.42 per 100 pounds.

The Board put out tenders for frozen hinds and crops at about US\$611.12 as of February 7, 1975, when the sale was consummated. This sale price would be equivalent to a live price of about US\$7.07 per 100 pounds.

The most significant feature of this sale is the c.i.f. price of US\$700 per ton. Compared with previous beef sales by the European Community at an f.o.b. price of US\$900 per ton and sales by Argentina at US\$825-\$850 per ton, the Australian price represents a substantial reduction in the price of beef and a large freight cost to the Australian Meat Board.

#### SUGAR AND TROPICAL PRODUCTS

#### **Bangladesh Sets Jute Policy**

Bangladesh on March 12 announced that no statutory minimum price for raw jute will be set for 1975-76, leaving growers free to sell jute at prevailing market prices. In practice, this was the case in 1974-75, when prices were well above the statutory minimum of about 10 cents per pound.

Raw jute requirements for 1975-76 are projected at 7 million bales of 180 kg each, or 1.26 million metric tons. Of this quantity, 3.2 million bales would go to domestic mills and

2.8 million for export. To meet these needs, plus village consumption of 200,000 bales and an estimated reduction in year-end carryover stocks from 1.5 million bales to 800,000 bales, would require a 1975 crop of 5.5-6 million bales. This would be nearly 50 percent greater than the Bangladesh estimate of 4 million bales for the 1974 crop.

The Government will continue to be the major buyer (about 70 percent of the crop) of raw jute. Reportedly, the Government will continue last season's purchasing policies, which saw prices move from about 10.5 cents per pound, to a high of about 28 cents a pound.

# U.S. Menthol Imports Double in Value

U.S. imports of menthol in 1974 amounted to \$29.1 million, or more than double the volume of imports in 1973 of \$13.5 million. The increase was caused by higher prices as the total 1974 import volume of 2.8 million pounds was less than the 3 million pounds imported in 1973. Brazil is by far the principal supplier of menthol to the United States, accounting for 2.8 million pounds valued at \$12.6 million in 1973 and 2.3 million pounds valued at \$23.4 million in 1974.

# Tropical Products Trade Group Meets

The Multilateral Trade Negotiations group on tropical products began its March 10-14 meeting with a number of country statements concerning how the work of the group should proceed. No work program was agreed upon in the first 2 days. The U.S. statement that work should begin with an exchange of request and offer lists on tariffs and nontariff barriers found support among Latin American delegations. The European Community's statement said the Community will promote commodity arrangement discussions in the tropical products group.

#### FRUIT, NUTS, AND VEGETABLES

# Greece Assures Tomato Growers Protection If Prices Fall

The Government of Greece has assured tomato growers protection in the event of world price declines. Farmers had recently demonstrated against the Government's decision to eliminate an \$8.25-per-metric-ton subsidy to tomato growers that had been in effect in 1973 and 1974.

Farmers also expressed discontent with the minimum raw product price of about \$47 per ton recently set by the Government. The farmers' lack of enthusiasm for this 26 percent increase in the minimum price from the previous year may limit tomato production to near the 1974 level of 959,000 tons rather than to the projected 1975 expansion.

The Government on February 2 lifted controls on the amount of paste to be allocated to the domestic and foreign markets. Paste exports for the 1973 season were placed at 59,500 tons gross weight, and were projected for the 1974 season at 70,000 tons gross weight.

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FOREIGN AGRICULTURE

#### Nigerian Wheat Imports Curbed

Continued from page 13

ment, several flour price increases were allowed, with the ex-mill price per 100-pound bag of flour rising from \$10.98 to \$14.95 on August 1973 and to \$17.90 in March 1974 (equivalent basis).

The natural result of the 65 percent jump in price was a drop in demand, which in turn has been reflected in static wheat imports plus a sudden shift in milling capacity from shortage to surplus. Further aggravating the problem, local foodstuffs—yams and cassava—have been more competitive than usual with bread as a result of good 1974 crops.

Prior to the price increases, bakeries constituted one of the fastest growing cottage industries in Nigeria (there are few modern bakeries in the country). With local clay ovens relatively inexpensive to construct—and demand for wheat products soaring—bakeries opened in

NIGERIAN WHEAT IMPORTS, BY COUNTRY OF ORIGIN, 1966-73 [In 1,000 metric tons]

Year	U.S.	Canada	Total
1966	 135.8	39.8	175.6
1967	 108.0	13.6	121.6
1968	 98.6	6.1	104.7
1969	 188.9	1.8	190.7
1970	 258.7	-	258.7
1971	 342.9	31.3	374.2
1972	 303.5	93.5	397.0
1973	 338.6	57.2	395.8

Source: 1966-70, Nigerian Federal Office of Statistics; 1971-73, U.S. and Canadian Trade books. (Most reliable sources for these years.)

many of the rural villages, only to begin shutting down in late 1973 as the anticipated business never materialized. This decline was accelerated by high costs also of other bread ingredients like shortening and sugar, the latter more important than in most countries because of Nigerian liking for a sweet bread: the flour-sugar ratio is 7-10: 1. With the retail prices of bread controlled, rising production costs left little profit for bakery operators.

On the other hand, demand for wheat is being boosted by the vast economic and social changes now underway in Nigeria. Bulging oil revenues are generating rapid economic growth, which in turn is causing more people to be employed and at more remunerative salaries. The ready convenience of bread—also a status food—will meet the needs of this higher paid, increasingly urban population.

With the aim of sharing some of its added wealth from oil, the Government is expected soon to substantially increase Government employee salaries, which will then probably prompt demands for similar increases in the private sector, especially among the many labor unions. Any resulting wage hike, of course, will increase production costs of flour millers, but they expect increased sales to be an offsetting factor, allowing them to hold out at current prices. And if expanded sales do materialize, the mills can operate at a higher percentage of capacity.

That consumption held relatively constant between 1972 and 1974, despite the sharp flour-price increase, attests to the strong demand for flour-based products that exists.

Realizing the potential for wheat Nigeria is looking into the possibility of expanding its own wheat production. which currently supplies little of Nigeria's wheat needs. Only in the northern areas of the country during the "winter" months do temperatures become cool enough to permit flowering of wheat, and since this is the dry season, the wheat must be irrigated. As a result, current wheat acreage totals around 8,000 acres, and production, 6,000 metric tons. Moreover, the resulting product is largely a soft wheat, while Nigerian bakers and consumers are used to hard wheat-most of the imported wheat is Hard Red Spring.

Despite such obstacles, a declared objective of the Nigerian Government is expanded self-sufficiency. The third 5-year plan outlines ambitious goals for greater irrigation in the north, with most of the irrigated area to be planted in wheat in the winter and rice in the summer. But it will be some 5 years before substantial irrigated acreage becomes available. And it remains to be seen how successful the wheat program will be.

In the meantime, rising affluence and changing consumption will probably keep Nigerian imports of U.S. wheat on the increase.





# FOREIGN AGRICULTURE

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SUPPLEMENT

March 1975

# DISINCENTIVES TO AGRICULTURAL PRODUCTION IN DEVELOPING COUNTRIES: A POLICY SURVEY

By

#### Abdullah A. Saleh

Foreign Commodity Analysis Foreign Agricultural Service

World grain production shortfalls caused by unfavorable weather, and depleted purchasing power caused by rising costs of imported oil have renewed public concern about the ability of less developed countries¹ (LDC's) to feed their people adequately. Some economists feel that the tight food supply-demand situation is likely to continue in the future. They argue that over the long run, even if weather conditions improve, increases in the population growth rate overshadow expected gains in productivity, given the current state of technology and institutional constraints facing producers in these countries.

To what extent are food-short nations aggravating their problem by government policies and programs that act as disincentives to agricultural production? To help answer this question the U.S. Department of Agriculture recently surveyed more than 50 countries for the purpose of identifying the type and degree of existing disincentives. These are not confined to LDC's, but are much more critical to their levels of food supply than are disincentives in developed countries. This paper describes the disincentives, but does not attempt to quantify the specific impacts of such policies on agricultural production.

Forty-six of the countries surveyed have policies that directly or indirectly discourage domestic production. Disincentives revealed by the survey include:

- 1. Controlling the selling price of the producers.
- 2. Controlling the retail price to the consumer.
- 3. Noncompetitive buying (procurement policy).
- 4. Export controls.
- 5. Export taxes.
- 6. Importing for sale at subsidized prices.
- 7. Exchange rate controls.
- 8. Restrictions on credit, land tenure, and farm size.
- 9. Restrictions on domestic movement of agricultural products, as from one district to another.

The impact of these policies on agricultural production is discussed below and a summary of the commodities affected by these policies within selected countries is given in an attached table.

It is commonly assumed that the objective of production is to maximize the producer's profit within the constraints of his technology, resource endowments, and final product demands. The consumer, in turn, demands products because they directly or indirectly satisfy some need or want. In an exchange economy where the forces of supply and demand are free to interact, both sellers and buyers benefit from specialization in production and exchange. Whether in a barter economy or a highly advanced monetary economy the free interaction of sellers and buyers results in a set of equilibrium prices, quantities, and trade flows. Given a crop failure, limited storage stocks, and a production

crop failure, limited storage stocks and a production time lag of several months, the burden of short-run adjustment falls upon market price and consumption. In other words, the interaction of supply and demand forces the price upward until it reaches a level that clears the market. The freely functioning price mechanism allocates the available supply among consumers according to ability to pay.

The impact of imposing price controls on agricultural production depends upon the extent to which the imposed price ceiling deviates from the equilibrium price level, other things being equal. Controls placed on prices below the equilibrium level discourage producers from planning future expansion and may drive marginal producers out of business. Price controls also discourage farmers from using more productive inputs such as improved seeds, fertilizers, irrigation, insecticides, and pesticides that are needed to increase production.

For example, Government controls on producer prices in Zaire has had detrimental effects on palm oil production. Palm oil production has been declining since 1968, in reaction to low administered prices. The 1974 output of 165,000 metric tons was 38,000 metric tons

<sup>&</sup>lt;sup>1</sup> The term LDC is used loosely here. Some economists prefer the term "developing countries." As far as this report is concerned, the two terms are equivalent.

<sup>&</sup>lt;sup>2</sup> "Products" are defined to include goods and services.

below that of 1968. Producers are very reluctant to invest in the expansion of their groves, since they know that 50 percent of the total output must be sold in the domestic market at an unprofitable price (at a loss).

Not too long ago, Greece's price ceilings on beef

resulted in shortages and black markets.

In many cases the objective of price controls is to have a more equitable food distribution, given inadequate domestic supplies. Although improvement in food distribution is desirable and necessary for many countries, price control does not necessarily mean that on a per capita basis the countries will enjoy an improved level of consumption.

With the lack of foreign exchange reserves to import food, developing countries can meet the increasing demand for food only by stimulating domestic production. One way to accomplish this objective is to free production from the artificial constraints, such as price controls, that discourage farmers from making additional investments to increase production. Higher price signals transmitted from the market will raise producer expectations about the supplies that can be absorbed by the market at prices that he believes will bring a reasonable profit. The pursuit of profit helps assure adequate supply levels.

Some countries use price controls as a means of fighting inflation. But what is really needed is more production, not less. Given a stable demand, an increase

in the supply would bring a decline in price.

Certain procurement policies and forms of noncompetitive buying are constraints that also lead to lower production. In many LDC's, the government is the sole buyer of the product. This has adverse effects on both producers and consumers. Governments use such practices to secure consumer supplies and as a source of revenue. While the producer is deprived of a higher, competitive price, the consumer ends up paying more for a smaller output, which results in a social welfare loss. In Thailand, for example, rice producers receive about one-fifth the world price for rice. It is estimated, based on long-run supply elasticity estimates, that Thailand can increase its annual rice output by 1 million metric tons by increasing the relative farm price of rice by 50 percent. This is quite substantial since Thailand's total rice exports in 1973 amounted to 0.9 million metric tons. However, one should not argue for procurement prices above the world price level since such a policy would in the long run lead to unnecessary surpluses and export subsidies.

Export controls and export taxes, in addition to being barriers to free trade, can result in the loss of potential export markets. Where substitute products or alternative supplies exist, the loss in exports is the

greatest. An export tax increases the price of the exported commodity, thus reducing the quantity bought by foreign buyers. This, in turn, leads to a loss of foreign exchange needed to finance imports. In addition, reduced foreign demand influences producers' expectations about the future demand, and they grow less than they would otherwise.

In order to maintain the flow of foreign exchange to finance imports of necessary commodities and equipment, many countries put higher priorities on exports. For example, Argentina has long maintained a stable beef export market through taxes and exchange rate manipulation. As domestic beef prices go up, exports, which are more price elastic than domestic demand, start declining. This induces the Government to devalue explicitly or implicitly (reduce export duties or increase subsidies) to maintain the level of exports. The quantity adjustment is thus forced upon domestic consumption. Since domestic demand is rather price inelastic, the price adjustment required to clear the market is larger than the initial free-market price increase. At the new price level, further devaluation is needed to maintain the level of exports. This process continues until the new output from an increased herd reaches the market. In summary, exchange rate manipulation directed toward stabilizing Argentine beef exports results in instability of beef prices.<sup>3</sup> Such policy creates uncertainty to producers and complicates the process of resource allocation.

Brazil is another example where exchange rate manipulation has been a popular policy. In the early 1950's the Government overvalued its currency, believing that an inelastic foreign demand for Brazilian coffee would bring more revenue to the country. This policy had an adverse effect, however, on the exports of other products in which Brazil had a comparative advantage in the world market. By 1953, the Government had apparently recognized this problem and since then it has been following a system of multiple exchange rates. The system of multiple exchange rates, as in the case of other forms of exchange rate manipulation, could introduce a tremendous amount of uncertainty that complicates farmers' decisions regarding new investment or resource allocation.

allocation.

In an effort to control inflation and in order to provide the consumers with adequate supply of basic food commodities, some governments resort to import subsidization. This policy, which results in a lower price in the domestic market, discourages producers within the country from expanding. Improved seed varieties around which the green revolution was built require intensive use of fertilizers, irrigation, and pesticides. Unless domestic prices are high enough to compensate for the investment in such costly inputs, producers have

<sup>&</sup>lt;sup>3</sup>Gustavo A. Nores: "Quarterly Structure of the Argentine Beef Cattle Economy: A Short-Run Model 1960-1970." Unpublished Ph.D. Thesis, Purdue University, June 1972, Chapter I.

<sup>&</sup>lt;sup>4</sup> Ralph G. Lattimore: "An Econometric Model of the Brazilian Beef Sector". Unpublished Ph.D. Thesis, Purdue University, August 1974. Chapter I.

no incentive to expand their production.

The effects of import subsidies are not confined to the production of grains but also extend to other agricultural commodities. For example, the subsidization of meat imports in Spain has depressed domestic livestock production. An alternative to the policy of import subsidization is to encourage domestic producers to expand their production by offering higher product prices that compensate for the added cost of using manufactured inputs needed for intensive production.

Restrictions imposed on farm size, land tenure, and credit to farmers constitute serious barriers to the expansion of agricultural production in many LDC's. Despite the improvement in land distribution brought about by land reform, many LDC's have experienced lower output. While land is an important factor of production, other factors must be combined with land to maintain or increase the level of production. At the early stages of adjustment in the agricultural sector, following land reform, the new owners are usually farm workers with limited experience in farm management and most likely have little or no capital to cover the variable costs of production. Poor management and lack of capital result in an inefficient allocation of resources that may lead to a decline in output until these deficiencies are corrected.

Restrictions on land tenure that limit farm size discourage farmers from investing in highly productive inputs and cause a loss of size economies. In the Dominican Republic, the land tenure law that limits riceland to 80 acres has been one reason that the country has needed to import rice over the past several years. The effect of this policy has been further amplified by price controls where the farmer receives a low price for his rice.

Eliminating its policy of requiring cooperative farming organizations in 1969, Tunisia proved that private enterprise is more efficient in allocation of resources. Tunisia's index of per capita agricultural production increased from 76 in 1969 to 117 in 1973 (1961-65 = 100).<sup>5</sup>

Rural credit policies that restrict credit to small farmers have limited the expansion of agricultural production in many LDC's. For example, the Government of Indonesia (GOI), in order to compensate rice producers for low rice prices, offers them subsidized credit. However, since the small farmers are viewed as

high risk borrowers by the banking system, only the larger farmers benefit from subsidized financing that facilitates the adoption of new production techniques. Therefore, it is only the larger farmers who have the negative impact of low prices partially neutralized through GOI subsidized credit programs. This results in an inefficient resource allocation for a large number of small farmers who need liquidity to improve their level of production.

Restrictions on movement of agricultural products from surplus districts to deficit districts within a country discourage farmers in the surplus areas from producing more. Perhaps the existence of such restrictions in India amplified the impact of food shortages following the last summer's drought and floods, where some States such as West Bengal were hit harder than others. Another example is Indonesia where interisland shipments of rice are prohibited except under Government auspices.

Policies that tend to restrict agricultural production are not unique to developing countries. As recently as 1973, the U.S. Government payment for feedgrain set-aside acreage totaled \$1.17 billion, and 9.4 million acres of land were withheld from production.6 Over the past two decades, U.S. agriculture has been the subject of various supply management programs. Supply management has generally had as its objective supply reduction rather than supply expansion. Current programs that act as restrictions on production in the United States are marketing quotas and acreage allotments for extra-long-staple cotton, peanuts, rice, and most types of tobacco. Also, recent environmental legislation calls attention to social trade-offs between what is conceived of as being socially desirable environment and higher production.

The discussion of the effects of disincentive policies on agricultural production in different countries included in this survey does not explicitly deal with interdependencies among the commodities. It is recognized that a disincentive for one commodity may prove to be an incentive for another. While it is beyond the scope of this analysis to present a quantitative evaluation of the net effect of various policies in different countries, a general indication of each country's need to expand its agricultural output can be grasped by examining Table 1. For most of the countries included in this study and based on a long trend (1952-1972), the rate of growth in domestic demand for food exceeds that for food production.

<sup>&</sup>lt;sup>5</sup>The Agricultural Situation in Africa and West Asia, ERS-Foreign 363, USDA, Washington, D.C. June 1974.

<sup>&</sup>lt;sup>6</sup>Commodity Fact Sheet, April 1974, ASCS, USDA

Table 1.-Population, Food Supply and Domestic Demand for Food in Selected Countries: Rate of Growth as Percent Per Year

	:	Growth Rate	<del>_</del>	::		:	Growth Rate	= 1/
	:	:	:Domestic	::		:	:	:Domestic
	:	: Food	:Demand	::		:	: Food	:Demand
Country	:Populati	ion:Productio	n:for Food	::	Country	:Populati	on:Production	n:for Food
	:			::		:		
Mexico	_	5.3	4.3		Tunisia		0.8	4.3
Dominican Republic.		2.2	3.6		Nigeria		2.0	3.1
Costa Rica	: 3.8	5.4	4.8	::	Senegal	: 2.2	3.3	1.2
Guatemala	: 3.0	4.1	4.2	::	Sierra Leone	: 2.0	2.4	3.9
Honduras	: 3.3	4.0	4.2	::	Zaire	: 2.0	0.2	2.3
Nicaragua	: 3.0	4.9	3.9	::		:		
Panama	: 3.2	4.3	4.8	::	Bangladesh	: 3.5	1.6	
El Salvador	: 3.0	3.6	4.1	::	Sri Lanka	: 2.5	3.6	3.1
	:			::	India	: 2.1	2.4	3.0
Argentina	: 1.7	1.8	2.0	::	Pakistan	: 3.0	3.0	4.2
Bolivia	: 2.3	5.0	2.7	::	Burma		2.4	3.3
Brazil	: 3.0	4.4	4.0	::	Indonesia	: 2.5	2.0	2.6
Chile	: 2.5	2.2	3.3	::	Malaysia (West.)	: 3.0	5.2	4.3
Colombia	: 3.3	3.1	3.9	::	Philippines	: 3.2	3.2	4.2
Ecuador	: 3.3	5.4	4.0	::	Thailand	: 3.1	5.3	4.6
Paraguay	: 3.1	2.6	3.4	::		:		
Peru	: 2.9	2.9	3.9	::	Egypt	: 2.6	3.4	3.8
Uruguay	: 1.3	.8	1.2		Greece		4.0	2.3
Venezuela	: 3.5	6.1	4.0	::	Iran	: 2.8	3.3	6.4
	:			::	Jordan	: 3.2	1.8	6.6
Angola	: 1.8	2.7	3.0	::	Syria	: 3.0	1.8	4.6
Ghana	: 2.9	3.9	3.2		Turkey		3.0	3.8
Ivory Coast	-	4.9	2.6		Spain		3.4	3.0
Kenya		2.6	4.6	::	_	:		
Liberia		1.1	1.8	::		:		
Morocco		2.8	3.3	::	United States	: 1.5	2.0	1.6

 $<sup>\</sup>underline{1}$ / Growth rates are based on an exponential trend 1952-72.

Source: Monthly Bul. of Ag. Econ. & Stat. 9 Vol. 23, Sept. 1974. FAO, Rome.

### APPENDIX -DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY

				Disimosostis			a du ati a m			
				Disincentiv	es to agri	cultural pr	oduction	l		
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export	Export taxes	Import subsidies	Exchange rate controls	Restric- tions on credit & land tenure	Restric- tions on movement of agri. products	Remarks
MEXICO										
Sugar	X	X		X						
Livestock				X	X			X	X	
Other foodstuffs	;	X		X	X				X	
DOMINICAN										
REPUBLIC										
Rice	X	X		X		X		X	X	
Beef	X	X		X	X					
Sugar		X			X					
Corn	X	X		X						
Dairy	X	X								
TRINIDAD &										
TOBAGO '										
Broilers	X	X								
Rice		X	X							
COSTA RICA										
Rice	X	X	X		X		X			
Beans	X	X	X		X	X	X			
Beef	X	X		X	X		X			
Sugar	X	X	X		X		X			
Dairy	X	X								
Bananas					X		X			
Coffee	X	X	X		X		X			
Corn	X	X								
GUATEMALA										
Meat		X								
Sugar		X								
Cotton	X	.,								
Milk	X	X								
BELIZE		**			3.7			v		Disincentives are
Sugar	X	X			X			X	X	substantial. Price
Beef	X	X						X X	Λ	controls created
Most foodstuffs	X	X						Λ		shortages.
HONDURAS										
Bananas					X					
Sugar	X	X	X							
Milk	X	X								
Cattle								X		

X denotes the existence of disincentives for the listed commodity or group of commodities.

## APPENDIX DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY—Continued

		Disincentives to agricultural production												
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export control	Export taxes	Import subsidies	Exchange rate controls	Restric- tions on credit & land tenure	Restric- tions on movement of agri. products	Remarks				
NICARAGUA														
Milk		X												
Cotton, Coffec,						*								
Tobacco					X			X						
Bananas, Rice,														
Sugar					X									
Hides, Cattle,					37									
Beef					X									
PANAMA														
Beef	X	X		X										
Other consumer														
items	X	X	X			X								
EL SALVADOR														
Meat				X										
Milk	X	X												
Grains	X	X		X										
Sugar			X											
Other foodstuffs	X	X	X											
ARGENTINA										,				
Beef	X	X			X		X			Multitiered ex-				
Major grains	X	X		X	X		X			change rate.				
Sunflower seeds	X		X											
Oilseed products				X	X		X			Export of oilseeds				
Other commodi-										is prohibited.				
tics							X			All agri. commodi-				
Wool							X			ties are subject to exchange rate control.				
BOLIVIA														
Cotton					X									
Many food														
products	X	X	X						X					

### APPENDIX -DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY—Continued

			Disi	ncentives	to agricul	tural prodi	uction			
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export	Export taxes	Import subsidies	Exchange rate controls	Restrictions on credit & land tenure	Restrictions on movement of agri. products	Remarks
BRAZIL										
Beef	X	X		X						Restricted slaughter off-season.
Milk Soybean oil Peanuts (excl.	X	X		X						Export prohibited.
HPS) HPS peanuts				X X						Export prohibited.
Peanut oil Cotton Frozen orange juice concentrate				X *						MEP - world price. MEP above world price. Taxes are used to
Sugar Cocoa				X	*					promote produc- tion and marketing.
CHILE										
Wheat & wheat										
products	X	X	X	X		X	X	X		No farms over 80
Sugarbeets Vegetable oil Beef	X	X X	X X	X X		X	X X X	X X X		irrigated acres or cquivalent.
Milk & milk										
products Rice	X X	X X					X X	X X		
COLOMBIA										
Sugar		X		X						All imports/exports
Corn & foodgrains	S	X	X	X		X	X	X		have to be licensed.
Soybeans	W	X	X	X		X	X			
Coffee Whcat	X	v	X	X	X		X			
Cotton		X		17		X	X			
Palm oil		X	X	X X		X	X X	X		
ECUADOR										
Coffee, cocoa				.,	X					
Sugar				X	X					
Bananas Most basic foods Milk	X	X			X					
PARAGUAY										
Beef	X	X		X						
Soybeans	X				X					
Wheat	X									
Sugarcane	X									

<sup>\*</sup>Not a disincentive at the present time.

### APPENDIX -DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY-Continued

			Dis	incentives	to agricul	tural produ	action			
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export control	Export taxes	Import subsidies	Exchange rate controls	Restric- tions on credit & land tenure	Restric- tions on movement of agri, products	Remarks
PERU										
Livestock					X			X		Agrarian reform
Cotton, wool				X	X	•		X		had its effect on
Coffee, potatoes,										Peru's agriculture.
beans	X	X	X							Restriction on
Wheat, rice	X	X	X	X		X				movement of agri- cultural products
Sugar, tobacco	X	X	X	X						applies to many commodities.
0.11-0.61										Indirect subsidies
Oilseeds & feed-	v	v	v			X				for wheat only.
grains	X X	X	X			Λ				
Meat, milk	Λ	X	X X	X						Non-competitive buying applies to
Fish meal & oil			Λ	X						tobacco only.
Dairy prod. & veg. oils						X				tobacco only.
JRUGUAY										
Livestock	X				X		X		X	
Wool	X				X		X			
Grains	X				X		X			
Oilseeds	X				X		X			
Milk	X	X								
Sugarcane &										
beets	X									
Wheat			X							
VENEZUELA										
Sugar		X		*						Controls on con-
Tobacco		X								sumer prices are
Rice		X		*						offset by minimur
Feedgrains		X				*				producer prices. On the average, agricultural pro-
										duction is not affected by such policies.
ANGOLA					v					
Coffee					X					
GHANA										
Cocoa	X		X					X		
Seed cotton	X		X					X		
IVORY COAST										
Coffee	X		X							
Cocoa	X		X							

<sup>\*</sup>Not a disincentive at the present time.

### APPENDIX -DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY-Continued

	T									
			Dis	incentives	to agricul	tural prod	uction			
Country and commodity	Controls on producer prices	Controls on eonsumer prices	Non- competi- tive buying	Export control	Export taxes	Import subsidies	Ex change rate controls	Restrie- tions on credit & land tenure	Restric- tions on movement of agri. products	Remarks
KENYA										
Wheat	X	X								
Corn	X	X								Large scale farming
Sugar	X	X								is discouraged.
Rice	X	X								is also surage a.
LIBERIA										
Many commodi- ties	X	X	X							
ties	A	Λ	Λ							
MOROCCO										
Oranges					X					Expropriated land
Wheat products		X				X				from foreign
Other staple										owners.
foods	X	X						X		
NIGERIA										
Cocoa	*		X					X		Farmers' price for
Coton								1.		cocoa is highest in
Seed cotton	X		X					X		West Africa.
GENIEC A I										
SENEGAL	v		v							
Peanuts	X		X							
SIERRA LEONE										
Some commodi-										
ties	X		X							
ZAIRE										
Palm oil	X	X								
Coffee	X	X	X		X					Two-tier exchange
Tobacco	X	X	X		X					rate.
Corn	X		X							14.00
BANGLADESH										
Wheat				X		X				Effect of import
Rice				X		X				subsidies is margi-
Edible oils				X						nal at present prices.
										1
SRI LANKA						37				
Rice						X				

<sup>\*</sup>Not a disincentive at the present time.

### APPENDIX -DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY-Continued

			Dis	incentives	to agricul	tural prod	uction			,
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export control	Export taxes	lmport subsidies	Exchange rate controls	Restrictions on credit & land tenure	Restric- tions on movement of agri. products	Remarks
INDIA										
Jute				X	X		X			
Cercals				X			X	X	-	
Rice	X	X		X			X	X	X	
Wheat	X	X		X			X	X	X	
Cotton				X			X			
PAKISTAN										
Wheat, flour	X	X		X		X		X	X	Wheat is heavily
Vegetalbe oil	X			X		X		X		subsidized. Wheat
Seed cotton				X					X	and veg. oil ex-
Rice Raw cotton			X		X			X	X	ports are banned. Interdistrict & interprovincial re- strictions on move- ment of agri. pro-
										ducts are imposed from time to time, particularly after harvest.
BURMA										
Ricc	X		X	X						
INDONES1A										
Rice Sugar	X	X	X			X		X X	X	
MALAYSIA										
Palm oil					X					
Rice	X	X								
PHILIPPINES										
Sugar	X	X	X	X	X					
Rice	X	X		X		X				
Desiccated										
coconuts					X					
Copra Coconut oil		X		X	X X					
THAILAND										
Rice		X	X	X	X					
Sugar		X		X	X					
EGYPT										
Cotton	X		X					X	X	
Rice	X		X					X	X	

APPENDIX
DISINCENTIVES TO AGRICULTURAL PRODUCTION BY COMMODITY AND COUNTRY—Continued

			Disi	ncentives	to agricul	tural prod	uction			
Country and commodity	Controls on producer prices	Controls on consumer prices	Non- competi- tive buying	Export control	Export taxes	Import subsidies	Exchange rate controls	Restric- tions on credit & land tenure	Restric- tions on movement of agri. products	Remarks
GREECE										
Cottonseed cake	X			X						
Cottonsced oil	X	X		X						
Cheese				X						Soybean oil com-
Wheat, bread		X		X		X				petes with olive
Feedgrains,										oil. Sugar prices
meat, eggs				X						arc usually fixed
Milk	X	X		7.						above the world
Corn, soybean	Λ	7.								price level but nov
oil						X				they are lower.
Olive oil	X	X		X		Λ				they are lower.
	X	X	X	X		X		X		
Sugar	^	Λ	Λ	Λ		Λ		Λ		
IRAN										
Wheat		X				X		X		
Ricc	•	X				X		7.		
Oilsceds & veg.		1				Λ				
oil		X				X				
Livestock, meat		Λ				Λ				
& milk		X				X		X		
& IIIIK		Λ				Λ		Λ		
JORDAN										
Wheat flour		X				X				
SYRIA										
Seed cotton	X		X	X				X		
Wheat and barley	X		X						X	
CLIDIVEY										
TURKEY Wheat	X	v		37		***		**		
	A	X		X		X		X	X	
Cotton										Overall policy is
Tobacco	W	V		3.7						ineffecient.
Livestock	X	X		X				X	X	
SPAIN										
Dairy	X	X				X				
Olive oil	X	X		X	X					
Meat and poultry		X		74	71	X				
Sugarbeets	X	X				X				
		7.				^				

